DOCUMENT RESUME

ED 298 746 EC 210 782

TITLE	Introduction to Communication.
INSTITUTION	Model Secondary School for the Deaf, Washington, D.C.
PUB DATE	86
NOTE	132p.
AVAILABLE FROM	Outreach, Pre-College Programs, Gallaudet College, Washington, DC 20002 ($8.95).
PUB TYPE	Guides - Classroom Use - Guides (For Teachers) (052)
EDRS PRICE	MF01 Plus Postage. PC Not Available from EDRS.
DESCRIPTORS	*Communication Skills; *Deafness; *Hearing (Physiology); *Hearing Impairments; High Schools; *Interpersonal Communication; Learning Strategies; *Lipreading; Student Educational Objectives

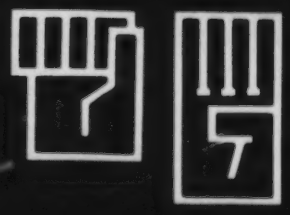
ABSTRACT

The curriculum was developed to help hearing impaired high school students understand hearing loss and its effects on communication skills as well as to develop strategies and find resources for building communication skills. Course materials are divided into six sections: (1) sound and hearing (concepts of sound, the anatomy and physiology of the hearing mechanism, causes of hearing loss, and audiograms); (2) hearing aids (styles, use, and care); (3) speechreading (components of the speechreading process and strategies to facilitate communication); (4) interpersonal communication (components of the communication process and interaction strategies); (5) communication devices and support services (telecommunications, signal devices, and interpreting services); (6) deaf awareness (current and historical perspectives on deafness and education of the deaf). Each instructional unit follows a format which covers objectives, an introductory activity, instructional methods, practice activities, and evaluation. (DB)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED298746

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
☑ This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

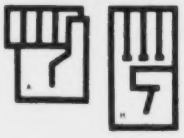


Abbe de L'Epee ASL
Amplification Audiology
Captioning Cued Speech Deaf
Culture Deafness Decibel
Education Frequency
Gallaudet Hearing
Hertz Intensity Interpreters
Laurent Clerc Oral/Manual
Sign Language Skills
Sound Speechreading
TDDs
Vibration

EC 210782

"PERMISSION TO REPRODUCE THIS MATERIAL IN MICROFICHE ONLY HAS BEEN GRANTED BY
Leonard Goldberg
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

INTRODUCTION TO COMMUNICATION



Abbe de L'Epee ASL
Amplification Audiology
Captioning Cued Speech Deaf
Culture Deafness Decibel
Education Frequency
Gallaudet Hearing
Hertz Intensity Interpreters

Laurent Clerc Oral/Manual
Sign Language Skills
Sound Speechreading
TDDs
Vibration

Developed by Members of the Communications Department
Model Secondary School for the Deaf
Gallaudet
Washington, DC

Copyright 1986: Outreach, Pre-College Programs
Gallaudet
Washington, DC
All rights reserved.

Gallaudet College is an equal opportunity employer and educational institution. Programs and services offered by Gallaudet College receive substantial financial support from the U. S. Department of Education.

INTRODUCTION TO COMMUNICATION

Contents

Foreword, iii

Using the Course Guide, v

List of Unit Objectives, vii

Unit 1: Sound and Hearing, 1

Concepts of sound, the anatomy and physiology of the hearing mechanism, causes of hearing loss, and audiograms.

Unit 2: Hearing Aids, 27

Styles, use and care.

Unit 3: Speechreading, 43

The components of the speechreading process and strategies to facilitate communication.

Unit 4: Interpersonal Communication, 59

The components of the communication process and interaction strategies.

Unit 5: Communication Devices and Support Services, 81

Telecommunications, signal devices, and interpreting services.

Unit 6: Deaf Awareness, 107

Current and historical perspectives on deafness and the education of deaf students.

FOREWORD

Introduction to Communication was developed to help hearing-impaired high school students understand hearing loss and the ways it affects their communication with others. The course is designed to help them develop strategies and find resources for building communication skills. Students also explore various cultural aspects of deafness.

This curriculum was developed by classroom teachers, and is addressed to other classroom teachers who work with similiar students, requirements, and teaching situations in their everyday lives. It provides practical, useful information and activities designed to increase student confidence in and enjoyment of human communication.

The course components of Introduction to Communication represent the accumulated experience of members of the MSSD Communications Department, who developed and refined the curriculum during more than 10 years of work with hearing-impaired students. The contributors to this text include: Scott Bally, Judy Bergan, Ellen Brigham, Laura Dugger, Linda Frazer, Susan Gowin, Venita Gragg, Janet Kurtz, Norman Lederman, Susanne Manzi, Jennifer McMillan, Marcia Montgomery, Anne Raymer, Karen Semanchik, Marian Wheltle, and Sarah Val.

Hearing-impaired students with a wide range of reading skills and intellectual abilities were involved during development of the course. The materials, therefore, are very flexible, addressing a broad spectrum of student needs and abilities. Teachers planning to use this guide are encouraged to adapt the course to the requirements of their own students, possibly reviewing some objectives quickly while investing more energy in others.

The course materials are divided into six sections:

- Unit 1: Sound and Hearing--concepts of sound, the anatomy and physiology of the hearing mechanism, causes of hearing loss, and audiograms.
- Unit 2: Hearing Aids--styles, use and care.
- Unit 3: Speechreading--the components of the speechreading process and strategies to facilitate communication.
- Unit 4: Interpersonal Communication--the components of the communication process and interaction strategies.
- Unit 5: Communication Devices and Support Services--telecommunications, signal devices, and interpreting services.
- Unit 6: Deaf Awareness--current and historical perspectives on deafness and education of the deaf.

Teachers of this course should have training in audiology and speech pathology, including some coursework in education of deaf students. The course is designed to help hearing impaired students become independent young adults, capable of monitoring, building, and refining their own methods of interpersonal communication through development of appropriate skills and strategies.

USING THE COURSE GUIDE

The units of Introduction to Communication may be taught in any sequence, except that the material on Hearing Aids must follow the unit that deals with Sound and Hearing.

Different amounts of instructional time will be required to teach each unit. Based on the experiences of teachers who have used these materials, the following blocks of time will probably be required to complete each unit:

Unit I: Sound and Hearing, 20 hours within a period of four weeks.
Unit II: Hearing Aids, 15 hours within three weeks.
Unit III: Speechreading, 10 hours within two weeks.
Unit IV: Interpersonal Communication, 10 hours within two weeks.
Unit V: Communication Devices and Support Services, 20 hours within four weeks.
Unit VI: Deaf Awareness, 15 hours within three weeks.

Unit Formats

Each part of the curriculum follows a basic format to focus attention on certain goals and to encourage their achievement. This system also provides flexibility for adding and changing student activities to meet the needs of individual classes.

Objectives: The objectives describe what students are expected to learn. Not all objectives in the course require the same level of thinking or are on the same level of difficulty.

For example, most of the objectives in the Hearing Aids unit are on the application level (students are expected to use the information), while those related to Deaf Awareness are on the comprehension level (students should be able to paraphrase the information).

Introduction: This section suggests ways of introducing the objective or topic to the students. Often the introduction is a teacher-led activity intended to familiarize students with new vocabulary or concepts so that they will be adequately prepared for later instruction.

Instruction: This section recommends teaching and modeling that will prepare students to complete the objectives successfully. The instruction section associated with each objective includes such materials as

lecture content, discussions, and other activities designed to promote mastery of the objective.

Practice: The practice section suggests ways to give students additional exposure to the new information, opportunities to reinforce independent learning, and a chance for feedback on their understanding of the materials. Practice worksheets follow some of the objectives.

Evaluation: This section describes methods of evaluating student achievement of the objectives. Quizzes have been developed for some objectives, and are included after the worksheets.

The evaluation section for each objective provides a test or procedure for determining the amount of learning that has taken place. The sample item should serve as a model for developing further assessment procedures. It is also helpful for clarifying the main intent of the learning objective so that additional learning or practice activities can be developed.

Objectives for the Six Units

Unit I: Sound and Hearing

1. Relate sound to vibrations, and understand that all sounds result from vibration.
2. Identify frequency or pitch as a characteristic of sound.
3. Identify intensity or "volume" as a characteristic of sound.
4. Interpret symbols used in an audiogram and use the information to describe hearing loss.
5. Name the parts of the outer and middle ear; be able to discuss the various causes of hearing loss related to each of those parts.
6. Name the parts of the inner ear and discuss the various causes of related hearing loss.

Unit II: Hearing Aids

1. Identify four different types of hearing aids; recognize features of each.
2. Identify the make, model, serial and battery numbers of several hearing aids.
3. Identify the basic external and internal parts of a hearing aid, and the functions of each part.
4. Demonstrate proper care and maintenance of hearing aids, earmolds, and batteries.
5. Find and deal with hearing aid problems.

Unit III: Speechreading

1. Use a variety of cues to aid in speechreading.
2. Identify factors that influence the ease or difficulty of speechreading.
3. Use categorical information to build speechreading efficiency.
4. Use context cues to understand homophenous words.
5. Use prediction and feedback techniques to improve speechreading abilities.

Unit IV: Interpersonal Communication

1. Demonstrate understanding of why and how people communicate.
2. Distinguish between verbal and nonverbal communication.
3. Identify basic aspects of the communication process.
4. Identify effective communication.
5. Identify ineffective communication.
6. Explain and demonstrate strategies for improving ineffective communication situations.
7. Recognize that people perceive, feel, and think differently.

8. Identify stereotyping and its effects on communication.

Unit V: Communication Devices and Support Services

1. Identify Telecommunication Devices for the Deaf (TDDs) and describe several types.
2. Identify the parts of a TDD and describe their functions.
3. Use a regular or TDI telephone directory to find a variety of telephone numbers.
4. Complete TDD calls using proper protocol.
5. Decide when an interpreter is needed and locate one independently.
6. Identify correct and incorrect behavior in interpreting situations.
7. Identify and describe various alerting devices and aids for deaf people.
8. Identify and describe educational and entertainment devices and aids for deaf people.

Unit VI: Deaf Awareness

1. Study and discuss the lives of deaf people in early history.
2. Study the evolution of various communication and educational approaches for deaf people.
3. Identify the need for and functions of political organizations of and for deaf people.
4. Identify various social organizations and activities of deaf people.
5. Define culture.
6. Develop awareness of various ideas and perspectives in deaf culture.
7. Identify American Sign Language (ASL) as the language of American deaf culture.

UNIT I. SOUND AND HEARING

Objective 1: Students will relate sound to vibrations, and will understand that all sounds result from vibration.

Introduction: Lead a discussion on sound as an invisible force that is constantly present in the air around us.

Instruction: Elicit students' ideas about sound as part of their lives, from music to spoken communication to such emergency signals as bells, sirens, horns.

Practice: Demonstrate the concepts of sound and vibration, using the examples in the Touching Sound factsheet.

Evaluation: Students should complete the worksheet on Sound and Vibrations.

Teaching Tips: Depending on how complex your sound experiments will be, the class will need some or all of the following materials: candles, balloons, drums (at least 12 inches in diameter), tissue paper, large radio or record player, slinky toy, vibrating platform.

UNIT I. SOUND AND HEARING

Factsheet 1: Touching Sound

A lighted candle can indicate air motion. Have a student bang a drum near a lighted candle. Movements of the flame will indicate how the vibrations are moving the air.

Have a student hold an inflated balloon or lightly touch the surface of a drum. Have another student bang a drum (12" or larger) at a distance of two to five feet. The first student will feel the vibrations through the balloon or drum surface. Point out that this demonstration also shows how the human eardrum responds to sound as vibrations travel through the air.

Have students place an open hand on their throats as they speak or hum, to feel the vibrations of the vocal cords. A piece of tissue paper can be held in front of the teacher's or a student's mouth as words are spoken. Movement of the air will also move the tissue. Guitar, piano, and other acoustic instruments should be touched and played. Identify the vibrating parts of the instruments.

Students should be encouraged to bring records or tapes to class, and radio or record players can be used to demonstrate sound. If possible, remove the loudspeaker grill to show how the cone changes electrical energy into acoustical energy. Show the air movement from the loudspeaker by placing tissue paper in front of the cone. Vibrations resulting from air movement can also be felt by touching the surface of a drum or a balloon held near the front of the loudspeaker.

A loudspeaker can be placed face down on a wooden floor or platform resting on a large surface of styrofoam or other material that will vibrate. The larger the loudspeaker, the more low-frequency sounds will be reproduced. (See suggested readings.)

How Sound Travels

Sound needs a medium to travel through. Discuss with the class the concept that molecules make it possible for sound to travel through air. Point out that molecules are very small particles of solids, liquids, or gasses, that cannot be seen without a microscope.

To demonstrate how sound waves move air molecules, transferring sound across distances, use a slinky toy. Have two students stretch a slinky across the floor, each person holding one end. If one person suddenly moves the slinky toward the other, vibrations will be seen moving along the spring.

Outer space is a vaccuum; there is no air. An explosion that occurred in outer space would produce no sound. Both light and radio waves can travel in outer space, since they do not require the medium of air. Astronauts depend on radio and light signals to carry out their missions. When they are outside the space capsule, they wear protective suits with air supply and radio equipment.

UNIT I. SOUND AND HEARING

Student Worksheet: Sound and Vibrations

1. What does the word vibrate mean?

2. List three things that make sound:

   a.

   b.

   c.

3. Sound needs something to move through. Sound can move through:

   a.

   b.

   c.

4. Sound cannot move through outer space. Why not?

5. How do astronauts communicate on the moon?

6. How do astronauts communicate from their space capsule to earth?

UNIT I. SOUND AND HEARING

Objective 2: Students will identify frequency or pitch as a characteristic of sound.

Introduction: Write the words "frequency," "pitch," and "hertz" on the blackboard. Explain that they are scientific terms related to vibration that results in the production of sound.

Define these words as measurement words. For example, to describe the size of people, we measure their height and weight, using the terms feet, inches, pounds, and ounces. The words frequency, pitch, and hertz are terms used for measurements of sound.

Instruction: Elaborate on the terms frequency, hertz, and pitch. Lead a discussion that includes the following information:

- Frequency measurements are designated by the term hertz (named for a German physicist who pioneered studies in acoustics during the 1800s).
- Hertz refers to the exact number of vibrations that are produced by a vibrating object in one second (1 hertz = 1 vibration per second).
- Pitch is a musical term that refers to letters or notes assigned to specific frequencies. The terms pitch and frequency are often used interchangeably, as in "high pitch," and "High frequency."
- Frequency is the more scientific term, and its unit of measurement, hertz, is often used to describe hearing loss and the strength of hearing equipment.

Practice: Demonstrate frequency and pitch using the examples in Factsheet 2. Point out that the abbreviation Hz means hertz, and K means 1000. Therefore, 1KHz is 1000 hertz, 2.5 KHz equals 2500 hertz, and so on. These abbreviations are often used to describe hearing.

Evaluation: Students should complete the worksheet on frequency.

Teaching Tips: Depending on the kinds of demonstrations you want to present, the class will need use of a guitar, piano, or other stringed instrument; empty soda or wine bottles of the same size; tape recorders; and visual tuning devices.

The classroom should also have tuning forks of different sizes. A tuning fork marked A440 will produce a musical pitch of A and an exact frequency of 440 hertz, which means it will vibrate 440 times in one second.

UNIT I. SOUND AND HEARING

Factsheet 2: Frequency and Pitch

Tuning Forks

Use tuning forks of at least four different sizes, starting at 125 Hz, to produce various high- and low-pitch sounds. The frequency or pitch of a tuning fork is related to its physical appearance. As with voice and musical instruments, size and mass affect frequency; small masses vibrate faster, large masses more slowly. Tuning forks are generally marked with letters and numbers. The letter corresponds to its pitch, and the number indicates its exact frequency. A tuning fork should only be gripped at its base and struck against firm, soft materials, such as rubber mallets or shoe heels.

A vibrating tuning fork, by itself, is very quiet and may not appear to be vibrating. Press the base of a vibrating tuning fork against a table or hollow surface to increase the sound. Dipping the tines of a tuning fork into a pan of still water will confirm visually that the instrument is vibrating. (Low frequency tuning forks work best for this experiment, as they make larger waves.)

Different Kinds of Hearing

People, animals, and insects hear sounds differently. Most young hearing people can hear a wide range of frequencies, from 20 Hz to 20,000 Hz (20 KHz). As people grow older, the parts inside their ears may not move or respond as well to the very fast vibrations of high-frequency sound. Many people use hearing aids as they grow older.

Acoustic Instruments

Examine an acoustic stringed instrument, preferably a guitar or piano. The strings do not all look the same: some are thicker than others. Strings also differ in the way they sound and feel. Explain that thick strings vibrate slowly to produce low frequency (low pitch) sounds. Thin strings vibrate more quickly, producing high-frequency (high-pitch) sounds. Long thick materials vibrate slowly because they have greater mass. Short thin materials, with less mass, vibrate quickly.

Human Vocal Cords

The human speech mechanism consists of vibrating components whose dimensions affect pitch in much the same way as guitar or piano strings. The large vocal cords of most adult males produce lower-frequency sounds than those of most adult females. Children, both girls and boys, have characteristically high-frequency voices, because of the smaller vibrating parts of their vocal mechanisms. People control their vocal pitch by tightening or loosening the vocal cords.

It is interesting to compare students' voices, then record them and play them back on a tape machine. For best results, connect the machine to large external loudspeakers. Record sentences spoken alternately by

adult males and adult females. Have students feel the vibrations of the loudspeaker, or touch drums and balloons placed near the loudspeaker. If they concentrate on the vibrations, they should notice that the male voice will feel lower in frequency (slower vibrations) and may yield a stronger signal.

Trapped Air

Fill several empty soda or wine bottles of the same size with different amounts of water. Then blow across the mouths of the bottles to produce tones. Sound is produced because blowing into or across the bottle causes the column of air trapped inside the bottle to vibrate.

The bottle containing the smallest amount of water will produce a low-frequency sound, because a larger amount of air is vibrating. (Remember, larger masses move slowly.) The bottles containing more water will produce higher-frequency sounds because of the smaller amounts of air being vibrated.

UNIT I. SOUND AND HEARING

Student Worksheet: Frequency

1. The word frequency describes the _____ that make sound.

2. What does the word hertz mean?

3. What is the short way to write hertz?

4. Give examples of things that make low-frequency sounds.

5. Give examples of things that make high-frequency sounds.

6. An older person may not hear _____ frequency sounds.

7. What does a musical composer do?

8. A composer writes musical notes on paper. Why?

9. Explain why the voices of men, women, and children have different frequencies.

10. 125 hertz is a (high or low) _____ frequency sound.

11. 8000 hertz is a (high or low) _____ frequency sound.

Objective 3: Students will identify intensity or "volume" as a characteristic of sound.

Introduction: Explain the concept of "intensity." Using an acoustical musical instrument, preferably an amplified guitar or piano, hit the same note firmly, then softly, several times. Ask the students to explain the difference between the two sounds. Convey the idea that both sounds are the same frequency, but that one is louder than the other.

Some students may think the soft sound was "higher" than the louder sound. It is important for students to distinguish between the concepts of frequency (pitch), which is often described as high or low; and intensity, which may be described as quiet/soft or loud/strong.

Instruction: Explain that there are exact measurements to describe the intensity or volume of a sound. The measurement word for intensity is decibel (abbreviated as dB). The decibel is named for Alexander Graham Bell, inventor of the telephone.

A sound level meter may be used to measure sound intensity. Have a student hold a sound meter three to five feet from the teacher while the teacher is speaking at normal conversational levels. The meter will read approximately 60 to 70 decibels (dB). (An inexpensive sound level meter may not register sounds lower than 60 dB.) Point out that distance also affects sound levels: closer is louder.

Explain the range of different sound intensities when measured at close range: 0dB = threshold of hearing, 35 dB = quiet library, 60 dB = conversational speech, 75 dB = traffic noise, 110 dB = live rock music group, 130 dB = jet plane taking off.

Practice: Play the radio or record player, gradually increasing the volume control from no sound to loud, and back to no sound. Explain how the sound is changing.

Have students use the sound level meter to explore the intensity of a variety of sound sources: car engines, horns, bells, loud voices, etc.

Evaluation: Have students complete the worksheet on intensity.

Teaching Tips: You need acoustic instruments, a radio or record player, and a sound level meter for this objective.

UNIT I. SOUND AND HEARING

Student Worksheet: Intensity

Name_____Date_____

1. The word intensity means how _____ or _____ a sound is.

2. What is the unit of measurement for intensity? _____

3. What is the short way to write decibel? _____

4. Give examples of things that make noise.

5. Give examples of quiet or weak sounds.

6. Give examples of loud or strong sounds.

7. What should people do when they work with loud machines?

8. How can you measure the intensity of a sound?

UNIT I. SOUND AND HEARING

Objective 4: Students will interpret symbols used on an audiogram, and use the information to describe their own hearing losses.

Introduction: Write on the blackboard and define the words audiogram, audiometer, and audiologist.

Instruction: Use the blank audiogram form on page 12 to demonstrate parts of the audiogram. Define the following terms:

Frequency (hz)
Intensity (dB)
O to represent the right ear.
X to represent the left ear.
A for aided hearing.
PTA for pure tone average.
SRT for speech reception,
Threshold of hearing.
SAT for speech awareness threshold.

Show students the decibel ranges for normal, mild, moderate, severe, and profound degrees of hearing loss, as follows:

Normal hearing	1 - 20 dB
Mild hearing loss	20 - 40 dB
Moderate	40 - 60 dB
Severe	60 - 80 dB
Profound	80 - 110 dB

Show students an audiogram with the sensation level and frequency characteristics of speech sounds. Ask students to identify the speech sounds they can and cannot hear. For example, a student who is unable to hear anything above 4000 Hz will not be able to hear the sounds of s, z, sh, v, f, th, or ch.

Demonstrate an audiometer, pointing out the frequency and intensity dials, the microphone, V.U. meter, and stimulus bar. Ask one student to complete a hearing test, with a second student recording the results on an audiogram transparency. Demonstrate pure tone conduction testing of each ear.

Practice: Have students complete the worksheet on hearing tests.

Distribute copies of their most recent audiogram to individual students, and answer any questions they may have. Ask students to locate specific information on the audiograms, such as left and right ear responses and pure tone average.

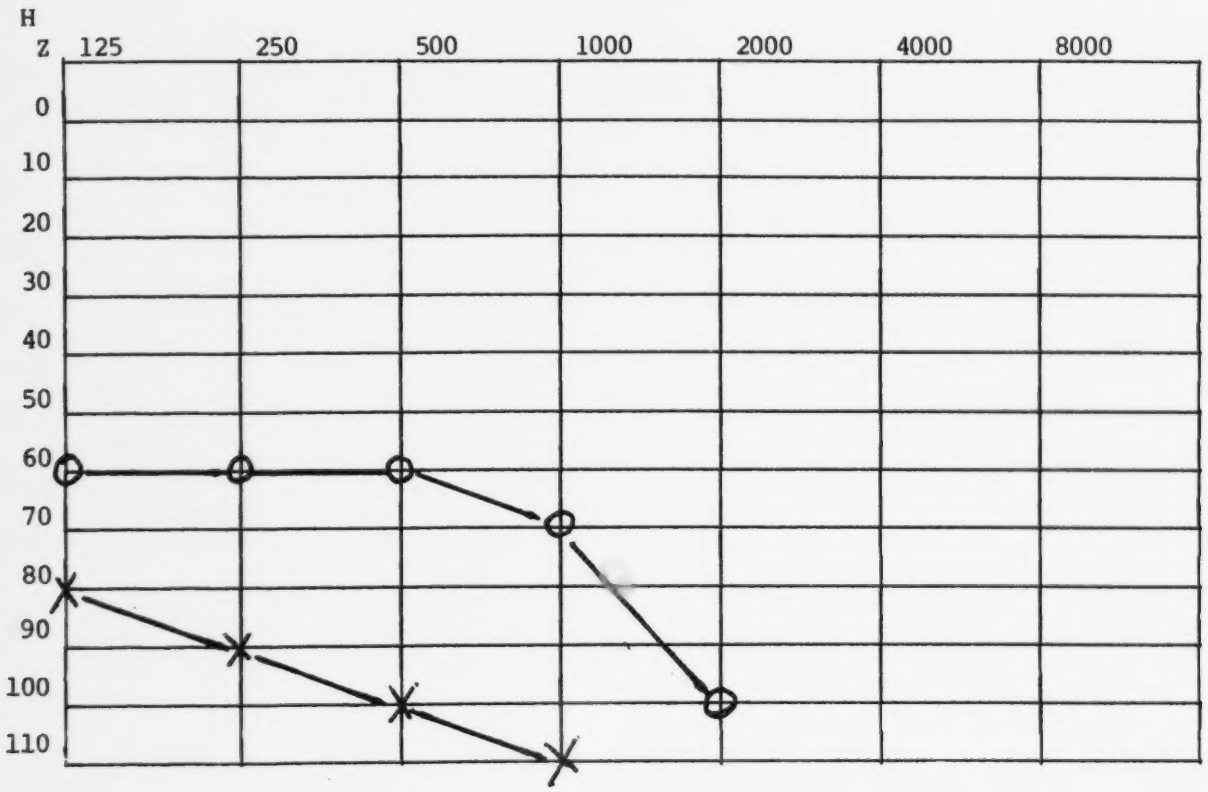
Have students take turns testing each other (pure tone air conduction) through the speech frequencies: 500, 1000, and 2000 Hz. Students should be encouraged to talk about the nature of their hearing loss and the sounds they are able to hear.

Evaluation: Students should complete the audiogram worksheet.

Teaching Tips: More information on audiometric terms is provided in the teacher resource sheet, page 13. For a picture of an audiogram with speech sounds placed according to frequencies, see the book, Aural Rehabilitation, by D.A. Saunders (page 100), Prentice-Hall, 1971.

HEARING TEST WORKSHEET

NAME_____DATE_____



Fill in the blanks:

1. This is Tom's _____.
(audiologist, audiogram, audiometer)

2. Tom is _____.
(hearing, deaf)

3. Tom's _____ ear hears sound better.
(left, right)

4. Tom _____ hear high frequency sounds.
(can, cannot)

UNIT I. SOUND AND HEARING

Teacher Resource Sheet: Audiometric Terms

Audiogram: A graph that shows hearing loss.

Speech Awareness Threshold (SAT): The lowest decibel level at which speech is heard.

Speech Reception Threshold (SRT): The lowest decibel level at which two-syllable words (baseball, ice cream) can be repeated at least 50 percent of the time.

Pure Tone Average: The decibel average of 500 Hz, 1000 Hz, and 2000 Hz. For example, subject hears:

70 dB at 500 Hz

80 dB at 1000 Hz

100 dB at 2000 Hz

Total 250 divided by 3 = 83.3

Pure Tone Average: 83 dB

Air Conduction Testing: Testing done under headphones.

UNIT I. SOUND AND HEARING

Worksheet: My Audiogram

Name_____ Date:_____

Please answer the following questions about your own audiogram.

1. Which of your ears can hear better?

   right____ left____ both the same____

2. Which low frequencies can you hear?

3. Which high frequencies can you hear?

4. Which frequencies do you not hear?

5. What is your Pure Tone Average?

   right ear _____dB, left ear _____dB

6. My hearing loss is (circle one):

   mild, moderate, severe, severe to profound, profound.

7. The "s" sound is at 8000 Hz. Look at your audiogram. Can you hear it?

8. The "o" sound is at 250 Hz. Look at your audiogram. Can you hear it?

9. Answer these questions about tests with your hearing aid.

   a. With my hearing aid, my pure tone average is _____dB.

   b. With my hearing aid, I can first hear speech at _____ dB (aided SAT).

   c. With my hearing aid, my hearing loss is (circle one):

      mild, moderate, severe, severe to profound, profound

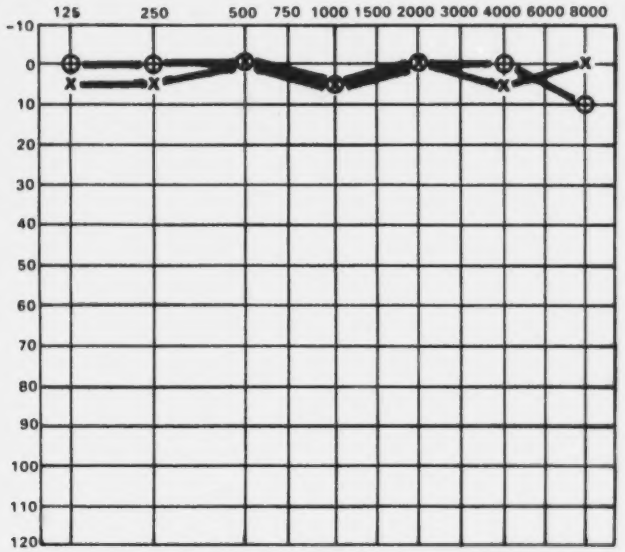
10. List the frequencies you cannot hear with your hearing aid.

UNIT I. SOUND AND HEARING

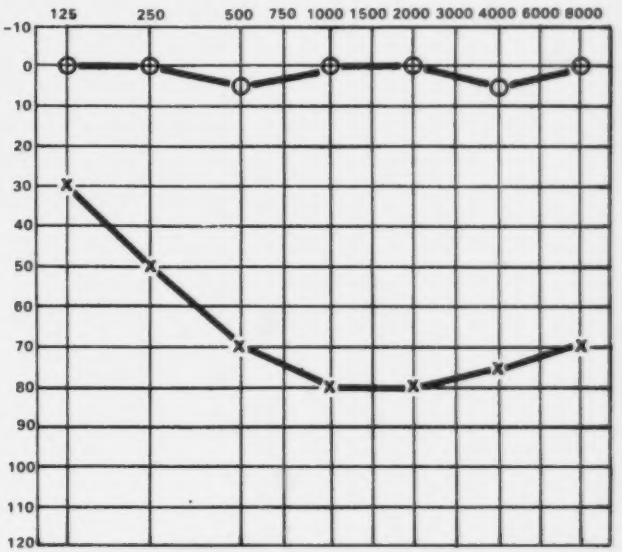
Worksheet: Looking at the Audiogram

Circle the correct answer for each illustration.

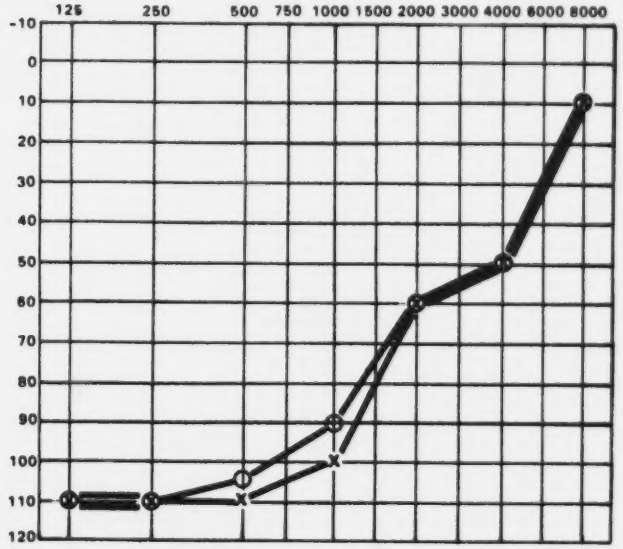
1. This audiogram shows: (normal hearing, profound hearing loss)



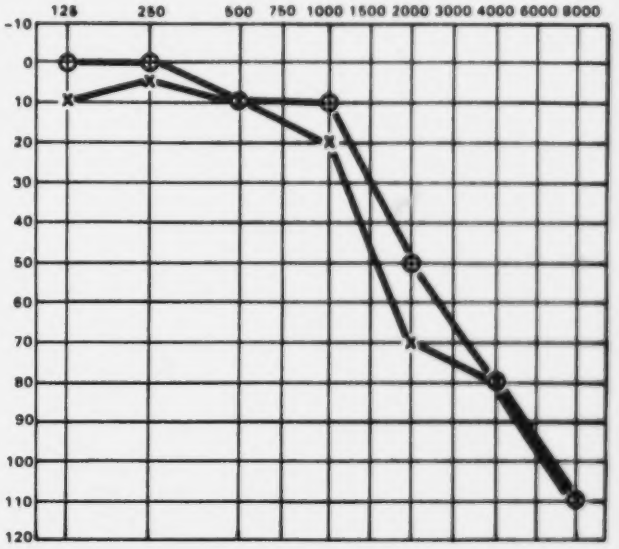
2. This audiogram shows normal hearing in: (left ear, right ear, both ears)



3. This audiogram shows better hearing in: (low, middle, high) frequencies.



4. This audiogram shows better hearing in: (low, middle, high) frequencies.



Objective 5: Students will name the parts of the outer and middle ear, and be able to discuss the various causes of hearing loss related to each of those parts.

Introduction: Review the parts and functions of the outer and middle ear. Show the videotape "The Ear and Hearing" (see Teaching Tips). Along with the video, or alone if it is not available, use drawings, transparencies, and three-dimensional models to point out and label each part.

Instruction: Discuss the functions of each part of the outer and middle ear, distinguishing clearly between the two areas. Demonstrate show how sound travels through the outer and middle ear.

Write the words Outer and Middle on the board, heading up two columns. Have students list as many parts of each area as they can remember. Be sure to include:

Outer Ear	Middle Ear
Pinna (external ear)	Hammer
External auditory canal	Anvil — middle ear bones
	Stirrup
	Eustachian tube

Describe conducive hearing loss, emphasizing that this form of loss results from interference with the physical vibrations of parts of the outer or middle ear. Discuss some of the causes of conductive hearing loss and their treatment, pointing out the site of each problem (see factsheet on Hearing Loss, page 22). Emphasize that most conductive hearing losses are temporary and can be corrected with medical care.

Practice: Have students use an otoscope, if available, to look into each others' ears. They should look for the external auditory canal, the eardrum, the cone of light (reflected from the eardrum), and the hammer.

Evaluation: Have students complete the worksheet on Parts of the Outer and Middle Ear.

Teaching Tips: "The Ear and Hearing" is available from:

Outreach Products
Gallaudet Bookstore
Gallaudet University
Washington, DC 20002 Telephone 800/672-6720

UNIT I. SOUND AND HEARING

Worksheet: The Outer and Middle Ear

Name_____ Date:_____

1. Write these parts of the ear in the correct column:

hammer	external auditory canal	eardrum
eustachian tube	stirrup	external ear
anvil	wax	

Outer Ear

Middle Ear

2. What does external mean?

3. What happens when sound vibrations hit the eardrum?

4. Name two things that can cause a conductive hearing loss.

   a.

   b.

5. You have a lot of wax in your ear. What should you do about it?

6. List two things that can cause your eardrum to break.

   a.

   b.

Objective 6: Students will name the parts of the inner ear and discuss the various causes of related hearing loss.

Introduction: Review the parts and functions of the inner ear, using "The Ear and Hearing," if it is available, as well as drawings and models of the human ear. Point out and label each part.

Instruction: Discuss the functions of each part of the inner ear. Use a picture or model to identify the structures and to trace how sound travels through the inner ear. Write the words Inner Ear on the blackboard, and have students list as many parts as they can remember, including the following:

Inner Ear

Oval Window
Round Window
Cochlea
Hair Cells
Semicircular Canals
Auditory Nerve

Identify sensorineural hearing loss as a failure of the system to generate or transmit sound. Discuss these facts about sensorineural hearing loss.

- It affects the inner ear or auditory nerve.
- It is usually permanent.
- There are various causes, depending on its time of onset: prenatal, perinatal, or postnatal.

Practice: Using a drawing or model of the ear, point to various parts and have students label them and complete the worksheet on Parts of the Ear. Get students involved in a discussion of the causes of their hearing loss.

Evaluation: Students should complete the quiz on Sensorineural Hearing Loss.

Teaching Tips: See the factsheet on Causes of Hearing Loss.

UNIT I. SOUND AND HEARING

Worksheet: Parts of the Ear

Name _____ Date_____

A. Fill in the blanks to make words.

1. e x _ _ _ n a l e a _
2. _ e m i - _ i _ c _ _ a r c _ n _ l _
3. e u _ t _ _ _ _ _ n t _ _ e
4. a _ _ i t _ r _ n _ _ v e
5. _ _ m m _ _
6. e x _ _ _ n _ l a u _ _ t o _ _ c a _ _ l
7. a _ _ _ l
8. c _ _ h l _ _
9. e _ _ d _ _ m
10. s _ i _ r _ p

B. List the parts of the ear in the right columns.

Outer Ear	Middle Ear	Inner Ear

UNIT I. SOUND AND HEARING

Quiz: Sensorineural Hearing Loss

Circle the right answer for each question. There may be more than one choice.

1. Sensorineural hearing loss is in the:

   a. Outer ear.

   b. Middle ear.

   c. Inner ear.

   d. External auditory canal.

2. Two things that can cause sensorineural hearing loss are:

   a. Wax.

   b. Measles.

   c. A broken ear drum.

   d. A high fever.

3. You are taking medicine and you become pregnant. You should:

   a. Take an aspirin and go to bed.

   b. Stop taking the medicine and call your doctor.

   c. Have a drink and stay up late.

   d. Smoke a cigarette and relax.

4. A sensorineural hearing loss can happen:

   a. Before birth (prenatal).

   b. When you feel afraid.

   c. After birth (postnatal).

   d. During birth (perinatal).

Quiz: Sensorineural Hearing Loss, continued

5. Sensorineural hearing loss is:

   a. Temporary.

   b. Permanent.

   c. Only in the morning.

   d. Infrequent.

6. A baby can become deaf during birth. Circle two ways this can happen.

   a. The baby is premature.

   b. The baby cries too loudly.

   c. The cord is wrapped around the baby's neck.

   d. The baby is a girl.

7. A premature baby is:

   a. A baby who is born too early.

   b. Twins

   c. A baby who is born deaf.

   d. A baby boy.

8. What kind of hearing loss do you have?

9. What caused your hearing loss?

10. When did you become deaf?

    Prenatal Perinatal Postnatal

11. Is your hearing loss temporary or permanent?

UNIT I. SOUND AND HEARING

Factsheet: Causes of Hearing Loss

Conductive Hearing Losses involve the outer or middle ear. The following conditions might cause or contribute to conductive hearing losses.

Condition	Treatment	Comments
a. Wax or foreign objects in the external auditory canal.	Physician removes materials with a special instrument.	Do not put things in your own ears or anyone else's.
b. Bacterial infection of external ear (swimmer's ear).	Ear drops.	
c. Atresia (congenital malformation of the external ear.	Possible surgery; special hearing aid if more than outer ear is involved.	
d. Perforation of the eardrum.	Surgery using tissue grafts; may heal spontaneously.	Plastic surgeons can make artificial ears that look better but do not function.
e. Fluid accumulation in the middle ear.	Medication prescribed by a physician.	
f. Otitis media infection; fluid accumulates and thickens, presses on the eardrum. Can be chronic, may result in moderate permanent hearing loss.	Antibiotics to heal the infection. Doctor may insert tiny tubes in eardrums to drain fluids; tubes are rejected as eardrum heals.	Very common in children and often very painful.
g. Otosclerosis, a progressive disease that impedes movement of the bones in the middle ear. Starts as mild loss that increases as bones become stiffer.	Surgery can remove and replace the stirrup bone with a plastic substitute. Not always effective, but techniques are improving.	Not common in children; usually not diagnosed until adulthood.

Causes of Hearing Loss (Continued)

Sensorineural Hearing Losses involve the inner ear and the auditory nerve. the following conditions may cause or contribute to sensorineural hearing loss.

Prenatal (before birth)	Causes/Comments
1. Familial/genetic	Deafness is sometimes hereditary. Sometimes two hearing parents have children some or all of whom are deaf. Deaf parents often have hearing children. Some individuals are born hearing, then have progressive hearing loss.
2. Mother's health during pregnancy:	
a. Rubella (German Measles)	When a woman has rubella during the first three months of pregnancy, her child may be born deaf or blind, with a heart condition or cleft palate, or with any combination of these problems. People often do not know they have rubella. Women may be tested and vaccinated for rubella before becoming pregnant.
b. Drug Use	Use of tobacco, alcohol, and drugs all contribute to low birth weight and premature birth, known factors in deafness and other problems.
c. Medications	A pregnant woman should take only medicine prescribed and monitored by her doctor. The fetus can be harmed by some medications.
Perinatal (during birth)	**Causes/Comments**
3. Anoxia (not enough oxygen to the brain)	During difficult labor or a breech birth, the umbilical cord may wrap around the baby's neck, stopping the flow of oxygen. In addition to deafness, it may cause cerebral palsy or other brain damage.
4. Jaundice	Jaundice occurs when the new baby's liver does not function properly. It is usually temporary and causes no damage, but sometimes hearing loss can result.
5. Rh Factor Incompatability	When the baby's blood type is different from that of the mother, the baby may need a complete transfusion. Rh problems are avoidable, but it is important for couples expecting children to have Rh blood tests.

Causes of Hearing Loss (Continued)

6. Premature Birth	A baby who weighs less than five pounds at birth is considered premature. The lungs may be underdeveloped and unable to get enough oxygen, causing deafness and other problems.
Postnatal (after birth)	Causes/Comments
7. High Fevers	Can cause brain damage or damage to auditory nerve. Possible with childhood diseases (mumps, measles, chicken pox, scarlet fever.)
8. Meningitis, Spinal Meningitis	Brain infection that is contagious and very serious, often causing deafness and other problems.
9. Trauma, excessive noises	Such factors as accidents, loud explosions, other environmental noise can cause deafness by damaging the brain, auditory nerve, or parts of the inner ear.
10. Tumors of the auditory nerve	Tumors may grow on the nerve and need to be removed surgically. Even after removal, the damage may cause deafness. Not common among children.
11. Meuniere's Disease	This disease of the semicurcular canals causes vertigo and dizziness, progressive hearing loss, and tinnitus (ringing in the ears). May be treated surgically; causes unknown.
12. Presbycusis	This is hearing loss associated with the aging process. Some older people tend to lose hearing and may need hearing aids.
13. Unknown Causes	Many people do not know the reasons for their hearing loss. Doctors cannot always find a cause.

UNIT I. SOUND AND HEARING

Bibliography and Resources

Books and Articles

Backus, J., The Acoustical Foundations of Music. New York: Norton & Co., 1978.

Denes, P.B., and Pinson, E.N., The Speech Chain. Garden City, NY: Anchor Books, 1973.

Gragg, Venita, What Is an Audiogram? Washington, DC: Outreach, Gallaudet Pre-College Programs, 1985.

Hall, D.E., Musical Acoustics: An Introduction. Belmont, CA: Wadsworth Publishing Co., 1980.

Lederman, Norman, The Science of Sound. Washington, DC: Outreach, Gallaudet Pre-College Programs, 1984.

Lederman, N., "Exploring the Concepts of Musical Sound," in Perspectives for Teachers of the Hearing Impaired, March 1983. Washington, DC: Outreach, Gallaudet Pre-College Programs.

Ling, D., and Ling, A., Aural Rehabilitation. Washington, DC: The Alexander Graham Bell Association for the Deaf, 1978.

Newby, H., Audiology: Principles and Practices. New York: Appleton-Century- Croft, 1958.

Sanders, D.A., Aural Rehabilitation. Englewood Cliffs, NJ: Prentice-Hall, Inc., 1971.

Semanchik, Karen, Music and You. Washington, DC: Outreach, Gallaudet Pre-College Programs, 1986.

Stevens, S.S., and Warshofsky, F., Sound and Hearing. New York: Time-Life Books, Inc., 1970, revised 1981.

Audiovisual Resources

- Videotape, "The Ear and Hearing," and many other materials on deafness are available for purchase or rental from:

  Gallaudet Library,
  Gallaudet College,
  Washington, DC 20002; telephone 202/722-5228.

- Anatomical models and charts, tuning forks, and a variety of equipment for demonstrating and measuring sound are available from:

  Central Scientific Co.
  11222 Melrose Ave.
  Franklin Park
  Chicago, IL 60131

  Fisher Scientific Co.
  4901 Lemoyne St.
  Chicago, IL 60651

  Frey Scientific Co.
  905 Hickory Lane
  Mansfield, OH 44905

  Sargent-Welch Co.
  7300 Lindner Ave.
  Skokie, IL 60077

- Visual sound display equipment is available from:

  Edmund Scientific Co.
  101 E. Glouchester Pike
  Barrington, NJ 08007

- Sound producing instruments and visual tuning equipment are available from:

  Rhythm Band, Inc.
  PO Box 126
  Fort Worth, TX 76101

  Gamble Music Co.
  312 Wabash Ave.
  Chicago, IL 60604

  Veneman Music Co.
  1150 Rockville Pike
  Rockville, MD 10852

UNIT II
HEARING AIDS

Objective 1: Students will identify four different styles of hearing aids and recognize features of each.

Introduction: List the four styles of hearing aids, as follows:

A. body aid
B. behind-the-ear
C. in-the-ear
D. eyeglass aid

Instruction: Demonstrate each style of aid, using pictures or models. List features of each style on the blackboard.

A. Body hearing aid:
   1. Can be very powerful.
   2. When worn under clothes, amplifies clothing noise.
   3. Cord may break easily.

B. Behind-the-ear hearing aid:
   1. Can be used for one or both ears (monaural or binaural).
   2. Can be ordered to match skin color.
   3. Can be very powerful.

C. In-the-ear hearing aid:
   1. Breaks easily when dropped.
   2. Can be hidden by the hair.
   3. Less powerful than body or behind-the-ear aid.

D. Eyeglass hearing aid:
   1. Can only be used when glasses are worn.
   2. Limits selection of eyeglasses.

Practice: Ask students which hearing aid styles they have used. Encourage students to discuss the features of various aids, and their personal experiences with them.

Evaluation: Use the test on page 36 and the worksheets on pages 39 and 40 to evaluate student learning.

Teaching Tips: Pictures and additional information on hearing aids may be found in materials listed in the bibliography.

UNIT II. HEARING AIDS

Objective 2: Students will identify the make, model, serial and battery numbers of several hearing aids.

Introduction: Explain and demonstrate several ways to identify a hearing aid.

Instruction: Introduce the terms make, model, serial number, and battery number. Both make and model can be explained by comparing them with makes and models of automobiles. For example:

Automobiles		Hearing Aids	
Make:	Honda	Make:	Phonic Ear
Model:	Civic	Model:	845PPa6C

Include the following information when discussing these terms:

A. Make: name of the company that manufacturers the aid; for example, Oticon.

B. Model: a specific type of hearing aid made by a particular company. The model may be indicated on the hearing aid by a letter and number code (i.e. 22XLP), or a name (i.e. Forte)

C. Serial Number: an identification number the manufacturer gives to each hearing aid as it is made. Other hearing aids of the same make and model will have different serial numbers.

D. Battery Number: the number found on a battery that identifies its type. Certain hearing aids require specific types of batteries.

Practice: Ask students to locate the make, model, serial and battery numbers of several different styles of hearing aids, using models and their own hearing aids.

Evaluation: Have students complete the Hearing Aids Quiz.

UNIT II. HEARING AIDS

Hearing Aids Quiz

1. Another word for <u>type</u> or <u>kind</u> of hearing aid is_____.

   a. name
   b. hearing aid
   c. style

2. There are four styles of hearing aids. Unscramble the letters to name each style.

   a. dbyo hearing aid = _____hearing aid.

   b. assaglyee hearing aid = _____hearing aid.

   c. eht-rae-ni hearing aid = _____hearing aid.

   d. bdnihe-are-het hearing aid = _____hearing aid.

3. When you were a small child what style of hearing aid did you use?

4. What style of hearing aid do you have now?

   List three features of your hearing aid.

5. What is the name of the company that made your hearing aid?

6. What is the model number_____ and serial number_____ of your hearing aid?

7. What kind of battery does your hearing aid use?

UNIT II. HEARING AIDS

Objective 3: Students will identify the basic external and internal parts of a hearing aid, and functions of each part.

Introduction: Make a transparency or student copies from pages 31 and 33. Use the sheets to demonstrate the parts of a hearing aid and to explain their functions.

Instruction: Explain that not all hearing aids are alike. Point out how they vary in appearance and in the arrangement of their parts. If possible, show different models of actual hearing aids during the discussion to emphasize their differences.

Practice: Have students complete the student worksheets.

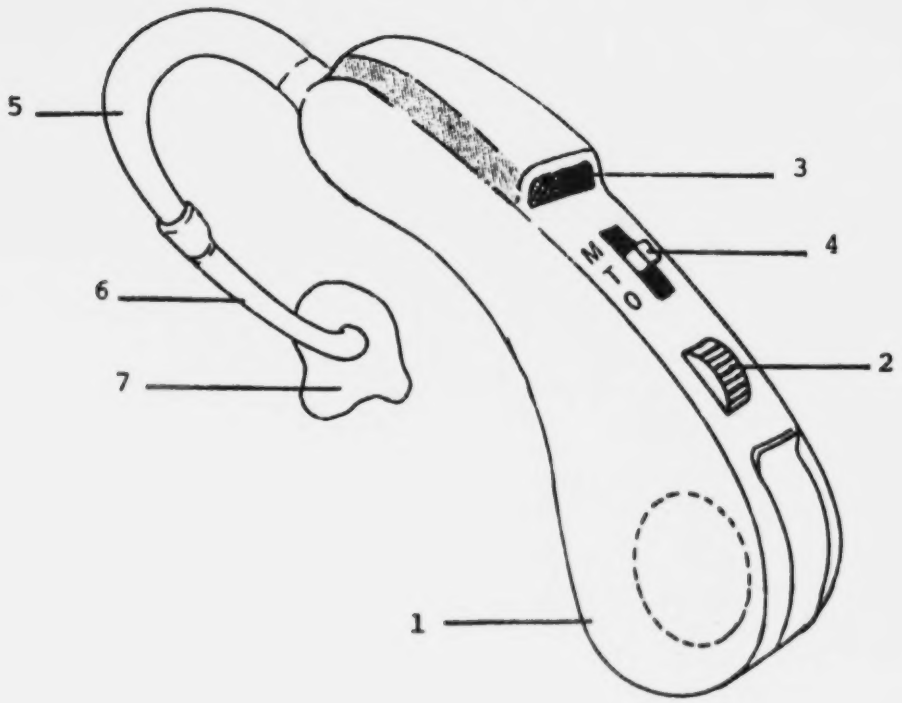
Evaluation: Each student should complete the Hearing Aid test and explain the function of a hearing aid.

Teaching Tips: Using a transparency of the diagram of internal parts of the hearing aid, show the concept of gain. For example, conversational speech is approximately 55dB.

If speech is	55dB
If the aid has gain of	60dB
The hearing aid user hears	115dB (output of the aid)

*For more information on gain and power output, refer to Orientation to Hearing Aids, Booklet #1, by J.S. Gauger. Published by NTID, Rochester, NY, 1982.

Teacher Resource: External Hearing Aid Parts



1. Battery Case: holds the battery.
2. Volume Control: allows the hearing aid user to make the sound louder or quieter.
3. Microphone Opening: allows sound to enter the hearing aid.
4. M-T-O Switch: M = Microphone or On; O = Off; T = Telephone
   Some hearing aids have a telephone switch to use in place of the microphone switch. Environmental sounds are not amplified when the "T" switch is in use.
5. Elbow: carries the amplified sound from the receiver earmold tubing.
6. Earmold tubing: carries sound from the elbow to the earmold.
7. Earmold: carries sound from the tubing to the ear canal.

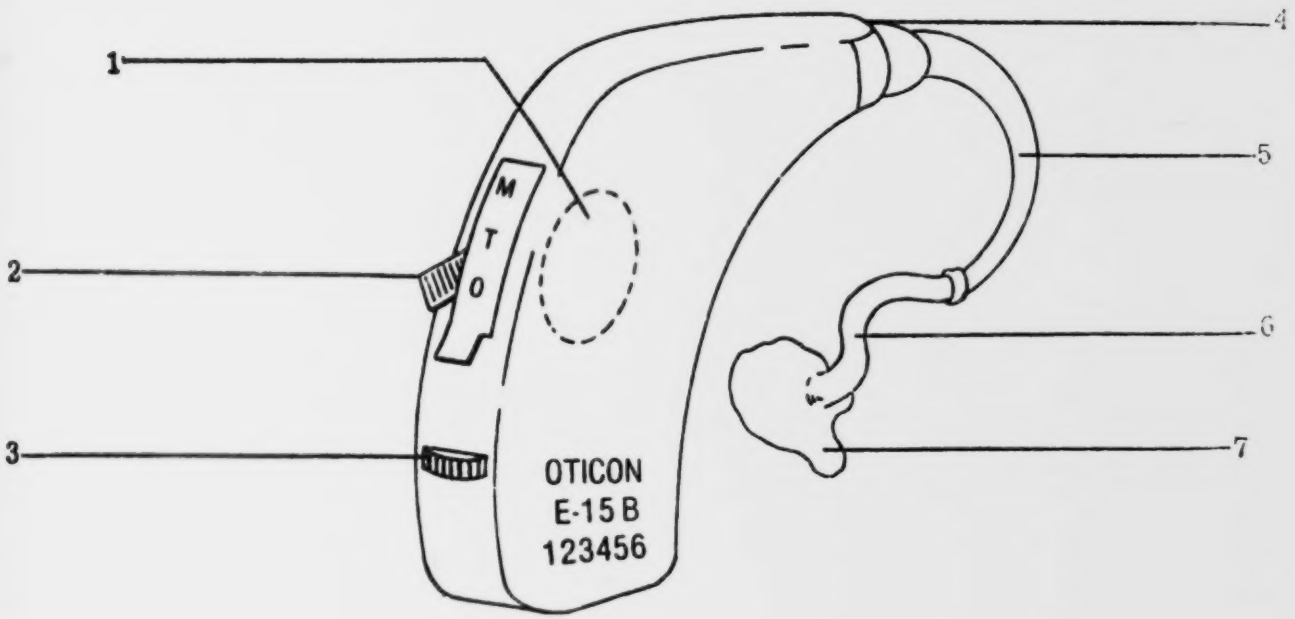
UNIT II. HEARING AIDS

Student Worksheet: External Hearing Aid Parts

Name:_____ Date:_____

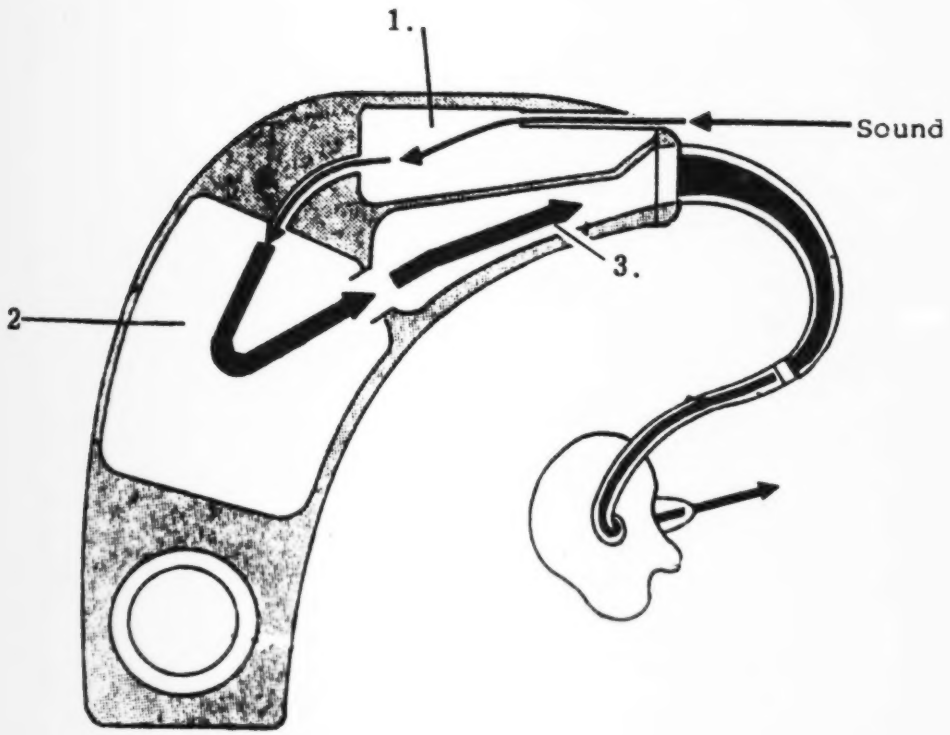
Label each part of the hearing aid, using these words:

Battery case	Microphone opening
Volume Control	M-T-O Switch
Earmold	Elbow
Tubing	



UNIT II. HEARING AIDS

Teacher Resource: Internal Parts of the Hearing Aid



1. Microphone: changes sound into electrical current.

2. Amplifier: makes the electricity stronger.

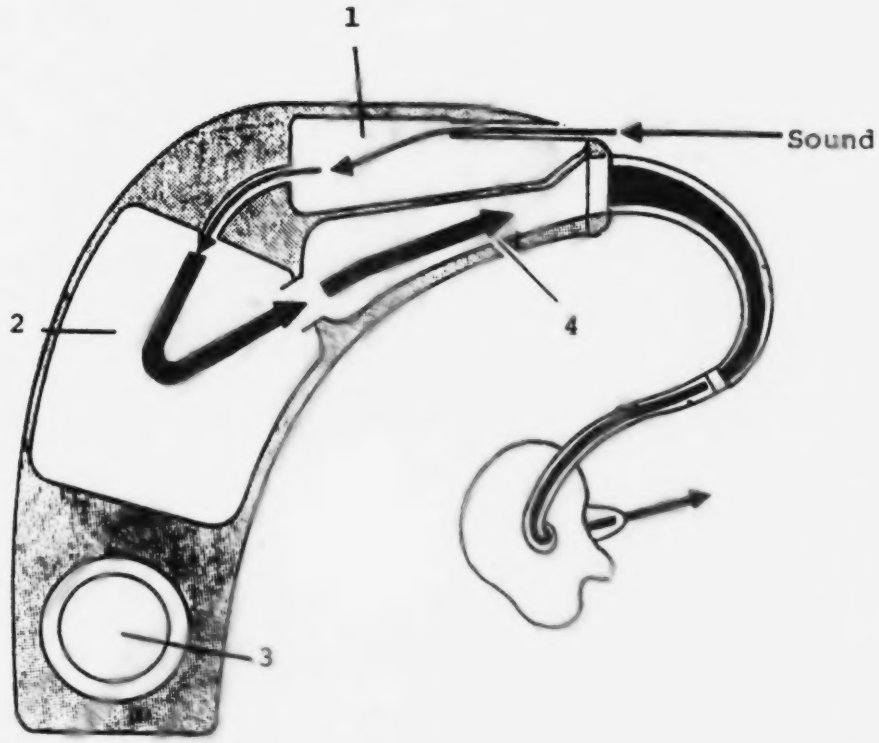
3. Receiver: changes the electricity to loud sound. The receiver sends the loud sound through the elbow, tubing and earmold, to the ear.

UNIT II. HEARING AIDS

Student Worksheet: Internal Parts of the Hearing Aid

Label each part of the hearing aid, using these words:

Battery	Amplifier
Microphone	Receiver



Hearing Aid Parts Puzzle

Name:_____ Date:_____

T A B A T T E R Y C A S E C E D

E E K A M E K B B A Y U N C N O

L N O U T U B E A S I N O M R L

E E O A Y T N X V E U R H S T O

P I R E V I E C E R D H P N T R

H L R O O N L R C L E D O M F T

O G U S O D B L Y N M G R H I N

N P R G K L O M X N N F C L J O

E D O J E O W D T W @ A I K Y C

S I A C P M U S B W X M M C D E

W A H S E R I A L N U M B E R M

I Y B I F A S V E Z N Y R E T U

T D G T P E V R U V V Z O P R L

C O A R A E E H T D N I H E B O

H B A L L I N T H E E A R P O V

Find the words below. They may be spelled horizontally, vertically, or diagonally in the puzzle.

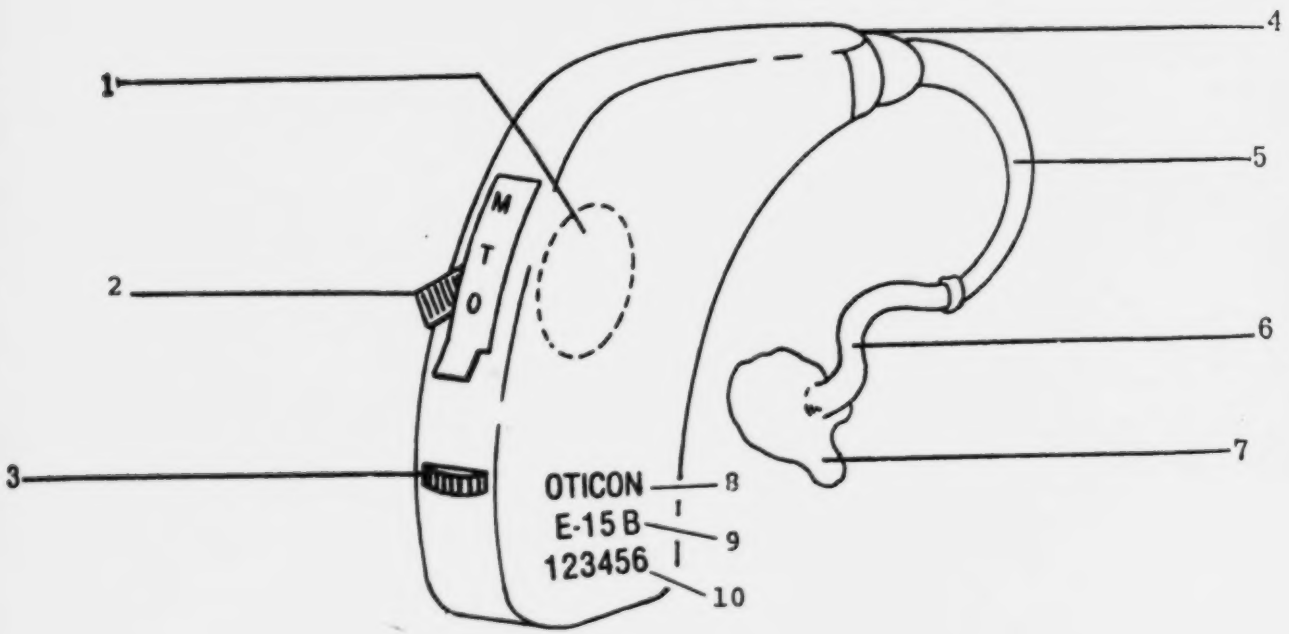
battery case	serial number	body aid
battery number	earmold	behind-the-ear
telephone switch	elbow	cord
volume control	case	plug
microphone	make	tube
receiver	model	all-in-the-ear

UNIT II. HEARING AIDS

Hearing Aids Test

Name:_____ Date:_____

A. Label the parts of this hearing aid.



1._____ 6._____

2._____ 7._____

3._____ 8._____

4._____ 9._____

5._____ 10._____

B. Name the three internal parts of a hearing aid.

1.

2.

3.

UNIT II. HEARING AIDS

Objective 4: Students will demonstrate how to take care of and maintain their hearing aids, earmolds, and batteries.

Introduction: Ask the students why it is important to take good care of their hearing aids.

Instruction: Demonstrate routine maintenance and cleaning of the hearing aid, earmold, and battery. Emphasize these points during the discussion:

A. Hearing aids should be kept clean and dry. Silica Gel, to absorb moisture from the hearing aid, may be found at a hearing aid dealer or drug store.

B. Earmolds should be examined daily and washed often with mild soap and water (an ultrasonic cleaning machine may also be used.) The earmold should be completely dry before being reattached to the hearing aid.

C. Batteries should be checked regularly. If a hearing aid is not functioning properly, the battery should be checked first. Battery testers are commercially available.

D. Battery cases should always be opened when the hearing aid is not being worn. Leaving the battery in the aid for a long time may cause corrosion, which is harmful to the aid. Slight corrosion can be removed with a pencil eraser.

Practice: Students should clean their earmolds with an ultrasonic cleaner or with mild soap and water.

Students should demonstrate use of a battery tester.

Evaluation: Following a checklist, ask students to complete the necessary procedures for maintaining their hearing aids, earmolds, and batteries.

UNIT II. HEARING AIDS

Objective 5: Students will find and deal with hearing aid problems.

Introduction: Ask the students to discuss some of the problems they have experienced with hearing aids.

Instruction: Demonstrate steps in checking hearing aid problems.

A. If the aid is not working, the student might:

1. Change the battery.
2. Make sure the battery is placed properly in the hearing aid.
3. Look for corrosion on the battery contacts. Use a pencil eraser to remove the corrosion.
4. Make sure that ear wax is not plugging the earmold canal.

B. For feedback (a whistling sound) the student should check the following to locate the source.

1. Earmold fit.
2. Holes in tubing or elbow.

C. For problems with internal parts, the aid should usually be sent back to the company for repairs.

Practice: Set up student pairs. Provide each pair with a solvable hearing aid problem (see Teaching Tips for problem situations). Ask each student team to locate the problem and explain how they would solve it.

Evaluation: Students complete the Troubleshooting worksheet.

Teaching Tips: Make sure students check these possible problems:

- o Holes in earmold tubing or elbow.
- o Batteries dead, or upside down in battery case.
- o Water in tubing.
- o Earmold clogged with wax, dirt, or water.
- o Earmold tubing twisted, bent, or hardened.

UNIT II. HEARING AIDS

Worksheet: Hearing Aid Troubleshooting

Name:_____ Date:_____

Write your answer to each question.

1. David's hearing aid is not working. What is the first thing David should do?

2. Tracey's hearing aid has feedback problems. It makes a whistling sound. Other people in class are complaining that the feedback is bothering them. Tracey's problem may be...

3. Donald's battery is dirty. It has brown and white powder on it. Donald should...

4. Judy's earmold is very dirty. Judy should...

5. Jim took a shower. He forgot to take off his hearing aid. The hearing aid got wet. Jim should...

True or False

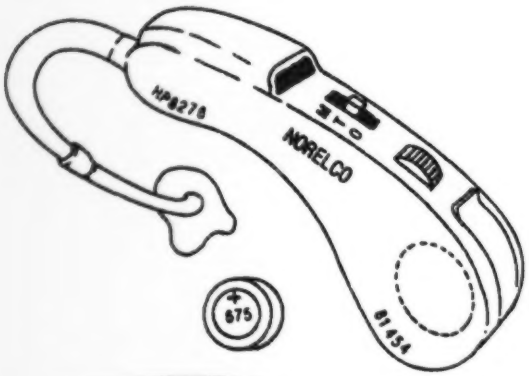
_____1. The tube in your earmold is twisted or bent. The hearing aid will sound loud enough.
_____2. You can save time and money if you learn to fix easy hearing aid problems by yourself.
_____3. Sometimes an audiologist or hearing aid dealer must fix your hearing aid.
_____4. The hearing aid will work if the battery is upside down in the battery case.
_____5. You should wash your hearing aid once a week.

UNIT II. HEARING AIDS

Hearing Aid Review Form

Name:_____
Date:_____

Fill in the blanks for each model.



Make:_____

Model:_____

Serial Number:_____

Battery Number:_____

Make:_____

Model:_____

Serial Number:_____

Battery Number:_____

Make:_____

Model:_____

Serial Number:_____

Battery Number:_____

UNIT II. HEARING AIDS

Bibliography and Resources

Books

Gauger, J.S. Orientation to Hearing Aids. Rochester, NY: National Technical Institute for the Deaf, 1982.

Pollack, M.D., Amplification for the Hearing Impaired. New York: Grune and Stratton, Inc., 1975.

Stabb, W.J., Hearing Aid Handbook. Blue Ridge Summit, TN: TAB Books, 1978.

Charts, pictures, and slides that show the internal parts of hearing aids and how they work are available from several manufacturers including those listed below. For more information, contact them directly.

Oticon Corporation
29 Schoolhouse Road
Sommerville, NJ 08873

Unitron Industries, Inc.
1414 Pine Grove Avenue
Port Huron, MI 48060

Widex Hearing Aid Company
36-14 Eleventh Street
Long Island City, NY 11106

Ultrasonic cleaners and battery testers

Hal Hen Company
PO Box 6077
Long Island City, NY 11106
718/392-6020

UNIT III
SPEECHREADING

Objective 1: Students will use a variety of cues to aid in speechreading.

Introduction: Write the words lipreading and speechreading on the blackboard. Let the class know that this unit focuses on information about speechreading and how to make the best use of their speechreading skills.

Instruction: Ask the class to help define the terms speechreading and lipreading.

Lipreading: The ability to interpret movements of the mouth (lips, tongue, teeth) as elements of speech. Lipreading is one part of speechreading.

Speechreading: The skill or ability to understand oral communication through the interpretation of lip and mouth movements; also using additional visual and linguistic cues such as gestures, facial expression, situational and contextual clues, and audition.

Practice: Select sentences of varying difficulty from the speechreading practice sheet. Present them to the class, using only lip movement to demonstrate the difficulty of lipreading.

Then present the same sentences adding voice, props, expression, and gestures to demonstrate speechreading. You may want to present the sentences the second time without voice, and a third time with the addition of voice, to demonstrate auditory enhancement.

The class should discuss the presentations and decide which presentation was more difficult to understand, and why.

Evaluation: Students should be able to list at least three factors that aid speechreading efficiency.

Worksheet
Speechreading Practice

Present the "a" sentences below, using lip movement only. Ask students to write each sentence as well as they can. The students' answer sheets should follow the format below, with blanks in place of the sentences.

Example: 1. a. _____

b. _____

Then present the same sentences with the addition of props, facial expressions, gestures, etc., and have students write their responses in the "b" spaces. They will have "a" and "b" responses for each sentence.

Discuss with the class which sentences were easier to speechread, emphasizing why the "b" sentences were easier.

1. a. Hi! How are you?
   b. Add wave, facial expression.

2. a. I don't know.
   b. Add shrug, facial expression.

3. a. Do you have change?
   b. Add $1.00 bill, facial expression, gesture.

4. a. It's freezing in here!
   b. Add shiver, facial expression.

5. a. Do you have a match?
   b. Add cigarette or gesture, empty matchbook, facial expression.

6 a. I'm sorry.
   b. Add facial expression.

7. a. I'm so hot!
   b. Add wiping brow, facial expression.

8. a. Would you like some coffee?
   b. Add gesture with cup, facial expression.

9. a. I think my watch is broken.
   b. Add gesture with watch.

10. a. Please lock the door.
    b. Add gesture with keys, eye movement, gesture to indicate door.

11. a. My battery is dead.
    b. Hold battery in hand.

12. a. Throw away this paper, please.
    b. Add crumpled paper, gesture.

UNIT III. SPEECHREADING

Objective 2: Students will identify factors that influence the ease or difficulty of speechreading.

Instruction: Ask the students whether speechreading is easy or difficult for most deaf people and for each of them personally. Have the class brainstorm factors that make speechreading difficult. The list should include factors involving both the speaker and the listener.

Speaker related factors:

- Rate of speaking
- Use of facial expressions and gestures.
- Degree of movement of speaker's articulators.
- Presence and amount of facial hair.
- Lighting and visibility.
- Distance between speaker and listener.
- Sight line between speaker and listener.
- Number of speakers.
- Visual ambiguity, or words that look alike (homophenous words). Give one or two examples.
- Amount of auditory information available.

Listener related factors:

- Knowledge of the topic.
- Knowledge of linguistic items (idiomatic phrases, vocabulary).
- Degree of attention and interest.
- Visual acuity.
- Degree to which listener is able to make use of audition.

Practice: Ask students to rate the ease or difficulty of speechreading in each situation below, on a scale of one to five.

		easy				hard
1.	Watching television news.	1	2	3	4	5
2.	Going to McDonald's or another fast food restaurant.	1	2	3	4	5
3.	Watching animated TV cartoons.	1	2	3	4	5
4.	Going to church.	1	2	3	4	5
5.	Talking to parents.	1	2	3	4	5
6.	Eating in the cafeteria with friends.	1	2	3	4	5
7.	Shopping for clothes in a big department store.	1	2	3	4	5
8.	Going for a job interview.	1	2	3	4	5
9.	Attending a club meeting.	1	2	3	4	5

Evaluation: Students should discuss the reasons they find each situation easy or difficult. Encourage all students to participate.

UNIT III. SPEECHREADING

Objective 3: Students will use categorical information to build speechreading efficiency.

Introduction: Define categories or categorization as a way to classify information.

Instruction: Use the practice activity to demonstrate that knowledge and use of categories can aid speechreading.

Practice: Present the following list of words, using voice. The students may guess answers they are not sure of and should not go back and change their answers.

Sample List
red
green
brown
purple
yellow

Students should identify the category of this list as "colors." Other lists can be generated by the teacher and students, for instance:

Category:	Fast Food	Category:	Animals
	shake		horse
	coke		cow
	hamburger		elephant
	french fries		monkey
	chicken nuggets		mouse

Ask students to complete the Speechreading Worksheet.

Introduce the Password Speechreading Game. The clue words can be spoken, signed, gestured, fingerspelled, or written.

Evaluation: As a homework or classroom assignment, have students generate their own categories and lists of associated words. Use these lists for a new game of Password.

UNIT III. SPEECHREADING

Worksheet: Speechreading Categories

Name:_____ Date:_____

A. Write the category for each group of words.

Example: blue
red
green
category: colors

1. 5
33
17
21
category: _____

2. tennis
soccer
baseball
track
category: _____

3. chair
table
lamp
bed
category: _____

4. triangle
circle
square
rectangle
category: _____

B. Write a list of words for each category.

Example: Desserts
1. brownie
2. ice cream
3. cake

Farm animals	Movies	Flowers
1.	1.	1.
2.	2.	2.
3.	3.	3.
Tools	**Schools**	**Pets**
1.	1.	1.
2.	2.	2.
3.	3.	3.

C. Underline the word that does not belong with the category. Then name the category.

Example: oranges apples pennies bananas
Category: fruit

1. bus train piano airplane Category: _____

2. necklace ring bracelet socks Category: _____

3. coffee gum lemonade milk Category: _____

4. steak ham chocolate turkey Category: _____

5. butterfly dollar dime nickel Category: _____

6. desk book blackboard comb Category: _____

7. excited happy sad outside Category: _____

8. tiger lion elephant cow Category: _____

UNIT III. SPEECHREADING

Password Game

Divide the class into two teams. The teacher or a student draws one card (see examples below) and gives clue words alternately to the teams until one team guesses the correct category. Team members must collaborate and agree on one group response.

This game can be played in two ways, depending on the nature of the class.

1. Use a broad category deck; the object is to identify the large category.

2. Use the small category decks, and give students credit for identifying both small and large categories. For example, in the first group of words below, the overall category is sports. Small categories are listed under the large category.

(large category) Sports

(small categories)

Baseball	Football	Bowling
1. run	1. pass	1. strike
2. bat	2. quarterback	2. spare
3. pitch	3. fumble	3. lane
4. bunt	4. touchdown	4. pins
5. catcher	5. Redskins	5. gutter

Tennis	Volleyball	Swimming
1. serve	1. spike	1. pool
2. racket	2. rotate	2. dive
3. net	3. net	3. freestyle
4. love	4. hands	4. butterfly

Fruit (large category)

Bananas	Oranges	Watermelons	Apples
1. long	1. juice	1. summer	1. red
2. yellow	2. morning	2. red	2. pie
3. monkey	3. color	3. seeds	3. tree
4. peel	4. Florida	4. juicy	4. core

Beach (large category)

Waves	Sand	Sun	Tan
1. water	1. shore	1. hot	1. skin
2. moving	2. land	2. bright	2. brown
3. ocean	3. castle	3. day	3. burn
4. surf	4. dig	4. shine	4. golden

Zoo Animals (large category)

Elephant	Giraffe	Gorilla
1. trunk	1. neck	1. bananas
2. gray	2. spots	2. monkey
3. huge	3. tall	3. King Kong
4. ears	4. African	4. ape

Time (large category)

Month	Holidays	Days
1. March	1. Christmas	1. Monday
2. April	2. Easter	2. Friday
3. January	3. New Years	3. Thursday
4. October	4. Valentine	4. Saturday

UNIT III. SPEECHREADING

Objective 4: The students will be able to use context clues to understand homophenous words.

Introduction: Using lip movements but no voice, present one word from a homophenous group such as my-pie-by-buy-bye. Ask students to identify the word. Give clues to help students list sets of homophenous words. Write the lists on the board or an overhead projector.

Instruction: Using the sets of words, ask several students to choose a few words and say them to the class under the following conditions:

- Alone, not in a sentence, without voice.
- In sentence context, without voice or facial expression.
- In sentence context, with voice.
- In sentence context, with facial expression.

Examples:
I love apple pie.
My name is Joe.
I want to buy some new shoes.
I love my mother.
Please buy some popcorn.
The pie is still warm.

Ask the class to identify the words wherever possible. It may be necessary for students to write out the sentences and to go through the list of words to find those that make the best sense in each sentence.

Then discuss the presentations and identify the modes that are easiest to speechread. Guide students toward the concept of context clues.

Practice: Write the words pay/bay/may on the board. Present the words without voice to indicate their homophenous nature. Sign and speak the following sentences one at a time, leaving out the homophenous word in each. Ask students to identify the word that fits best on the basis of context. For example:

Group 1:
1. Where is your pay check?
2. May is a spring month.
3. We went sailing on the bay.

Group 2:
1. Friday is pay day.
2. The bay is good for fishing.
3. May I borrow your pen?

Objective 4 (continued)

Group 3:
1. I promise I'll pay you back on Friday.
2. The water in the bay is cold.
3. Flowers bloom in May.

Write the words show/Joe on the board and do a similar exercise using sentences like the following.

1. My brother's name is Joe.
2. Show me your picture.
3. Will you show me where the bus stops?
4. Why is Joe late?

Write the words fight/fine/vine on the board and use the following sentences.

1. I don't like to fight.
2. I feel fine.
3. Grapes grow on a vine.
4. My brothers fight all the time.
5. Your work is fine.
6. Poison ivy is a vine.

Evaluation: Evaluate the students' performances on the practice activities.

Teaching Tips: Consider introducing an activity to show the use of Cued Speech as an aid to lipreading. If you are familiar with cueing, show students how to use the various hand shapes to clarify homophenous sounds.

Teachers who are not familiar with Cued Speech should read source materials on the technique before the class discussion. Most materials related to Cued Speech include practice suggestions (See the Cued Speech Factsheet.)

UNIT III. SPEECHREADING

Factsheet: Cued Speech

1. What is Cued Speech?

Cued speech uses hand positions to supplement speech and to help clarify homophenous sounds. Cued Speech helps make speechreading clearer, because speech sounds that look the same on the lips are indicated by different hand shapes.

2. Who invented Cued Speech?

Dr. R. Orin Cornett created Cued Speech in 1966 at Gallaudet College in Washington, DC.

3. Why Did Dr. Cornett invent Cued Speech?

Dr. Cornett saw that many parents of deaf children lacked good communication with their children. Spoken language is too difficult for many deaf children, and sign language usually requires years of study for the parents.

Because of problems in communication, most deaf children have a great deal of difficulty learning and using English. Dr. Cornett developed Cued Speech on the theory that if all the sounds of English were represented visually, hearing-impaired children could receive consistent, unambiguous visual patterns of spoken English. With exposure to clear spoken English in their homes, Dr. Cornett theorized, deaf children would be able to "hear" language in much the same way as hearing children, using vision rather than hearing.

4. Is Cued Speech difficult to learn?

Cued speech requires approximately one week to learn, and about six months of use to attain fluency.

5. Who uses Cued Speech?

Cued Speech has been adapted for 33 languages and dialects and is used in many countries around the world. Most often parents, siblings and teachers use it with hearing-impaired children. Other families learn to use it with members who have lost their hearing in adulthood.

6. Does Cued Speech help deaf children speak more clearly?

Cued Speech was designed to aid lipreading and to help in the development of language, not to teach speech. For improvement in speech, deaf children should receive speech therapy in addition to language development through Cued Speech.

7. Should Cued Speech replace sign language?

Cued Speech was not developed to replace sign language among deaf people. Dr. Cornett recommends that hearing-impaired children learn English through Cued Speech, and also learn American Sign Language so they can talk easily with other hearing-impaired people.

8. Could a student who knew Cued Speech communicate with people who don't know it?

Evidence seems to show that students who learn Cued Speech become skilled speechreaders. Because they learn good English through Cued Speech, they can guess much of what is said by using speechreading without cues.

9. Why do many people misunderstand the purpose of Cued Speech?

Many people assume that Cued Speech was designed to replace sign language. However, this is not the case (see #7). It is one more way to help deaf people learn to use language and to communicate with others.

UNIT III. SPEECHREADING

Objective 5: Students will use predictions and feedback techniques to improve their speechreading abilities.

Introduction: Introduce the concept of making predictions, or anticipating what may happen or be said in a variety of situations.

Instruction: Set up the following role play situations: doctor and patient interaction, going to McDonald's, a family at dinner, and an audiologist and student with a non-functioning hearing aid. Ask students to list comments they might expect to hear in these situations. If necessary, provide lists of likely remarks in a multiple choice format (See Teacher Tips).

Once students understand this concept, discuss feedback strategies to use when responses are unclear, and review the list of factors that can interfere with effective speechreading.

Students should practice using feedback techniques to improve difficult communication situations, as when requesting additional information, repetition, explanation, or use of writing; and when asking for changes in distance, lighting, and other factors.

Practice: Set up a variety of situations to practice specific feedback techniques, for instance:

Clarification:

a. "Would you please repeat that?"
b. "What did you say"
c. "My plane leaves at what time?"
d. Repeating what <u>was</u> understood until the missing information is supplied: ("Your brother went <u>where</u> for Thanksgiving?").

Explanation:

e. "I have a hearing loss and must read your lips. Would you please repeat that?"

Situation:

f. "The lighting here is not good for me. Will you please move over here?" Or, "I depend on lip-reading and facial expressions, but the light is dim here. I'd like to move my chair."

Evaluation: Evaluate students' performances in the role-play situations. Encourage students to evaluate their own performances.

Objective 5: (continued)

Teaching Tips: Use multiple-choice questions to help students predict what will be said; for example:

"The food server at McDonald's is talking to you. Which question will he ask?"

a. Is your shirt green?
b. To eat here or to go?
c. What time is it?
d. Do you have $5.00?

UNIT III. SPEECHREADING

Speechreading Bibliography

Books and Journal Articles

Berger, K.W., Speechreading, Principles and Methods. Kent, OH: Herald Publishing House, 1978.

Deyo, David, Speechreading in Context: Functional Activities for Student Practice. Washington, DC: Outreach, Gallaudet Pre-College Programs, 1984.

Erber, N.P. and Hirsch, I.J., "Auditory Training," in H. Davis and S.R. Silverman, (eds.), Hearing and Deafness. New York: Holt, Rinehart, and Winston, 1978.

Jeffers, J. and Barley, M., Speechreading. Springfield, IL: C.C. Thomas, 1971.

Montgomery, A. and Jackson, P.L., "Physical Characteristics of the Lips Underlying Vowel Lipreading Performance," in Journal of the Acoustical Society of America, 1983.

Walden, Prosek, Montgomery, Scherr, and Jones, "Effects of Training on the Visual Recognition of Consonants," in Journal of Speech and Hearing Research, 1977.

UNIT IV
INTERPERSONAL COMMUNICATION

Objective 1:	Students will demonstrate understanding of why and how people communicate.
Introduction:	Ask the class to think of reasons why people give and seek information. Emphasize the idea that information exchange occurs because people have needs that can only be met by communicating with others.
Instruction:	Ask students to define communication. Write all the definitions on the blackboard. Emphasize the concept of communication as a "process of giving and receiving meaningful information through words, signs, and nonverbal cues."
Practice:	Demonstrate various communication methods (sign, speech, gestures, etc.). Ask students to identify each of the methods. Then have students volunteer to demonstrate different methods of communication.
Evaluation:	Students should be able to give examples of several communication situations, explaining the methods and their purposes (survival, enjoyment, etc.).

UNIT IV. INTERPERSONAL COMMUNICATION

Objective 2: Students will distinguish between verbal and nonverbal communication.

Introduction: Define the categories of communication, verbal and nonverbal. Include the following points:

- o Verbal communication is an idea expressed with words or signs.
- o Nonverbal communication is an idea expressed without words or signs.

Instruction: Ask the students to list examples of verbal communication (sign language, writing, fingerspelling, talking).

Discuss in class the following examples of nonverbal communication: body language, gestures, appearance as expressed through clothing, and spatial relationships (distance between speakers).

Practice: Pass out the worksheet "What Is This Person Communicating?" Explain to the students that they will see pictures of six different people. Show pictures that correspond to the specific forms of nonverbal communication listed on the worksheet.

Ask students to look at each picture and name the area of nonverbal communication it represents. Then they should explain their interpretations of the pictures and agree on captions for each one.

Evaluation: Students should demonstrate understanding of both verbal and nonverbal communication by using both modes to communicate an idea or feeling.

Each student should be given two cards, describing two different communication situations. They should take turns conveying nonverbally the ideas or feelings written on their cards. The group should try to guess and describe verbally what each student is communicating.

The worksheet, "Say It Both Ways - Verbal and Nonverbal," suggests verbal and nonverbal communication situations.

Teaching Tips: Pictures for the practice exercise should include examples of communication through body language, facial expression, clothing and general appearance, gestures, and space. They may be taken from books, magazines, or photographs.

UNIT IV. INTERPERSONAL COMMUNICATION

Student Worksheet
What Is This Person Communicating?

Name:_____Date:_____

Look at the pictures. Write what you think each person is saying, and what makes you think so.

Picture #1:

Picture #2:

Picture #3:

Picture #4:

Picture #5:

Picture #6:

Student Worksheet
Say It Both Ways: Verbal and Nonverbal

Suggestions for activity cards:

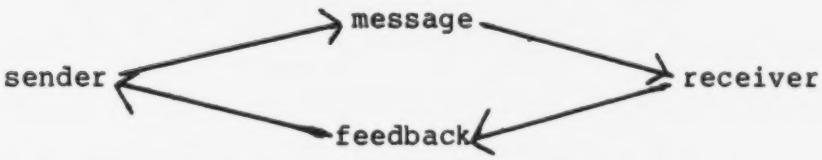
1. I'm tired.
2. I don't understand.
3. I'm hungry.
4. I didn't know that.
5. I don't care.
6. I don't want to.
7. I'm bored.
8. I'm very scared.
9. I'm worried.
10. I hate you.
11. I'm sorry.
12. I'm sick.
13. I'm embarrassed.
14. Hurry up!
15. Wait a minute.
16. I can't believe it.
17. I forgot.
18. I'm mad!
19. Go away!
20. Come here.
21. That's disgusting.
22. I didn't hear you.
23. I give up!
24. I'm very excited!

UNIT IV. INTERPERSONAL COMMUNICATION

Objective 3: Students will identify the basic aspects of the communication process.

Introduction: Discuss the communication process, including the following points:

- o People communicate with each other, using sign language, speech, gestures, facial expressions, and body language to express and share ideas.
- o Communication is an ongoing process. Several basic factors are necessary for effective communication, and the roles of both communicators may change during the dialogue.



Instruction: Use a picture to demonstrate some type of interaction, and discuss the following questions with your students.

- o Who is communicating?
- o What is being communicated?
- o Who is getting the information?
- o What is the response?
- o Do they understand each other? How do you know?

Practice: Select comic strips that illustrate aspects of the communication process, then ask the students to label each picture as a part of the process. Have students use role play to demonstrate all aspects of communication. See the worksheet "Roleplay Situations in the Communication Process."

Students should also discuss and demonstrate how different responses can change the communication process. For example, if a boy puts his arm around a girl, she can choose from at least two possible responses. She can hug him back or move away.

Evaluation: Using comic strips, students should identify each part of the communication process. They should also define the communication as either verbal or nonverbal.

Student Worksheet
Role Play Situations for the Communication Process

1. Mother asks Terry, "How was school today?" Terry doesn't answer, shrugs and sits down.

2. Jim gives Debbie a bunch of flowers. She hugs him and says, "I love you."

3. Mark puts his arm around Jenny; she shrinks and moves away.

4. Teacher asks Susan where her homework is. Susan says, "I forgot to do it."

5. Teacher takes attendance and calls out John's name. John replies, "Here."

6. Bill offers Alison some food. Alison eats the food and makes a terrible facial expression.

7. Bobby is crying. Marty comforts him.

8. Dan asks mother for the car keys. Mother says, "Sorry, but your sister took the car."

9. Jean is eating lunch alone. Lynn sits down beside her. Jean picks up her tray and leaves.

10. Darren says, "I want one Big Mac, two fries and a large coke." Waitress says, "Is that for here or to go?"

UNIT IV. INTERPERSONAL COMMUNICATION

Objective 4: Students will identify effective communication.

Introduction: Define effective communication as taking place when two or more people make themselves understood to each other.

Instruction: Ask the question: "How do you know when you are communicating effectively?" Refer to the communication process and stress the importance of feedback as the other person's response. Effective communication occurs when both people understand each other's feedback.

Practice: Ask students to identify feedback through role play and to assess the effectiveness of the communication. Several typical role play situations are suggested on the worksheet "Role Play Situations for Effective Communication".

Other practice may include trying to communicate with body language, making introductions, and creating a good first impression. Students should discuss factors that contribute to the effective communication in their role plays.

Evaluation: Provide students with comics, cartoons, or other materials that illustrate communication situations. After studying each situation, students should decide whether helpful feedback occurred and whether the communication was effective.

Teaching Tips: Repeat some of the similar activities for Objective 5, or teach objectives 4 and 5 simultaneously, comparing effective and ineffective communication.

Student Worksheet
Role Play Situations for Effective Communication

Structured Situations

1. Mother calls to her son, "Wake up, Brian! It's time for school." Brian responds, "Oh Mom, I don't want to go today!"

2. Boy asks waitress for one double cheeseburger, french fries and a soda. The waitress brings it to him.

3. One person asks another, "What time is it?" The second person responds, "It's 9:15."

4. Policeman asks driver for her driver's license. The driver shows her license to the policeman.

Nonstructured Situations

1. Ordering a pizza over the telephone.

2. Asking for help in class, then not understanding the teacher's instructions.

3. Setting up a dental appointment to have your teeth cleaned.

4. In a department store, asking a salesperson for assistance.

UNIT IV. INTERPERSONAL COMMUNICATION

Objective 5: Students will identify ineffective communication.

Introduction: Ask the students to help define ineffective communication as a situation in which one person does not understand another.

Instruction: Generate a class discussion of situations that involve ineffective communication. Encourage students to talk about their own experiences with ineffective communication, for instance, how they feel when they are interrupted, ignored, insulted or misunderstood.

List on the board all the factors named as contributing to communication breakdown.

Practice: Using the worksheet "Role Play Situations for Effective Communication" from Objective 4, ask students to modify the situations so that they result in ineffective communication.

Discuss factors that interfere with paying attention. See worksheet "Role Play Situations for Improving Communication Skills" (1).

Evaluation: Have students critique a regular class period for effective communication. They should identify any examples of ineffective communication that occur, and suggest ways to improve communication and make it more effective.

Student Worksheet
Role Play Situations for Improving Communication Skills (1)

1. The audiologist tells you to come for your hearing test during second period. You think she signed second period, but you lipread sixth period. What should you do?

2. Your teacher signs "Go to the _____." She fingerspells the last word, but you don't understand the word. What should you do?

3. You are reading the school bulletin board. You see your name on the list to take SAT tests, but it doesn't say where to go. What should you do?

4. You are at the airport and a hearing person tells you where to put your bags. You don't understand what she said. What should you do?

5. Your father wants you to drive him to the train station at 8:00. You understand where he wants to go, but not the time. What should you do?

UNIT IV. INTERPERSONAL COMMUNICATION

Objective 6: Students will explain and demonstrate strategies for improving ineffective communication situations.

Introduction: Make it clear that students have responsibilities as communicators. For example, if an intended message is not understood, both parties have a responsibility to try again, whether they are giving or receiving the information. They can try various kinds of communication strategies to deal with that responsibility.

Instruction: Ask students to discuss personal situations in which miscommunication occurred, and how they handled them. Lead a discussion about how an appropriate response or feedback can make communication more effective.

Discuss various strategies for improving communication, using such examples as repeating information or saying it in a different way; giving examples; sharing feelings; or understanding another point of view.

Practice: Give students the worksheet, "Missed the Message? What Do You Do?" Have students discuss examples from the worksheet, focusing on strategies to use when others do not understand.

Evaluation: In groups of two or three, have students role play different communication situations in which the intended message is not completely understood. After each role play, ask another group of two or three to go over the same situation using effective feedback. Role play situations are suggested on the worksheet, "Role Play Situations for Improving Communication Skills" (2).

UNIT IV. INTERPERSONAL COMMUNICATION

Student Worksheet
Missed the Message? What Do You Do?

Name:_____ Date:_____

Appropriate verbal or nonverbal responses are necessary for successful communication. For example:

Mary says, "The Celtics won the game. The score was _____. You don't understand the score. What should you do?

Answer: Ask Mary to repeat the score.

Your friend says, "I live on 16th Street." 16th Street is a long street and you need more information. What should you do?

Answer: Ask your friend the house number on 16th Street.

Repeat the information given to you in a conversation to make sure that you understand the message. This is especially important when you need to be sure of names or numbers.

You might say, for example: "You want me to meet you at 9:30, in front of the movie theatre at the corner of 16th and L Streets, right?"

Read the message below. What response would you use to get the missing information?

1. Your friend says, "I am having a party. Please bring some _____ and some _____."

   What do you say?

2. Your friend says, "Do you want to go to the _____?"

   What do you say?

3. Your teacher says, "For homework, do pages _____ and _____."

   What do you say?

4. The school principal announces, "School will close at _____ because of bad weather."

   What do you do?

5. Your friend says, "My telephone number is _____."

   What do you say?

UNIT IV. INTERPERSONAL COMMUNICATION

Student Worksheet
Role Play Situations for Improving Communication Skills (2)

1. Two people are making a cake. One person reads the recipe while the other person follows the recipe directions.

2. You are unfamiliar with one word a guest lecturer has used throughout an important presentation.

3. A group of students is listening to one student tell a joke. Everyone begins laughing except you.

4. Mother asks you to go to the store and buy eggs, bread, and _____.

5. During a TTY conversation, your friend types, "I will meet you at X:30."

UNIT IV. INTERPERSONAL COMMUNICATION

Objective 7: Students will recognize that people perceive, feel, and think differently.

Introduction: Initiate a class discussion of individuality, making sure the students are aware that people are not necessarily alike. They have different ideas, feelings, values, and goals.

Instruction: Discuss factors that may influence a person's values, thinking, and personality. Introduce the term "perception" as applying to the way people see each other and feel about the things and ideas around them. Perceptions can affect communication either positively or negatively. Give examples.

Practice: Give students the worksheet "What Do You Think?" that focuses on personal interests and ideas. Ask students to complete their worksheets and then discuss their responses. They should try to identify some of their values (choices of jobs, friends, colleges, etc.).

After students identify their values, lead a discussion of how peer pressure, parental pressure, or their own feelings can influence their perceptions and their communication.

Ask students to role play the following situations:

a. You are a two-year-old child. How does the world look to you, as compared to the way it looks to most high school students?

b. Suppose you were a cat or dog. How would you see the world?

c. Pretend you are another student's parent. Explain to your "child" why he can't go to a party. (Use the term "point of view" here.)

Evaluation: Have students develop lists of needed supplies for a camping trip. After each student has drawn up a long list, ask them to reduce their lists to the 10 most important items.

After sharing the individual lists, ask the class to agree on a final list of 10 items. When opinions differ, encourage students to discuss their individual choices and feelings, and the reasons why they feel that way.

UNIT IV. INTERPERSONAL COMMUNICATION

Student Worksheet
What Do You Think?

Name:_____ Date:_____

1. What is your favorite food?

2. Where is the best place to live in the United States?

3. What is your favorite time of the year?

4. What is your favorite holiday?

5. Which do you prefer, football or basketball?

6. What is your favorite subject in school?

7. If you won a $10,000 lottery, what would you do with the money?

UNIT IV. INTERPERSONAL COMMUNICATION

Objective 8: Students will identify stereotyping and its effects on communication.

Introduction: Explain that people often do not perceive others as individuals, with their own thoughts, ideas and feelings. Some people see members of certain groups as all alike, all having the same characteristics.

Instruction: Discuss the following points:

Some people think that others can be judged by the groups they belong to--as if people in any group are all alike. For example, some people think that deaf people cannot learn. Other people seem to think that all older people are weak and ill.

Introduce the term "stereotype" as a "tendency to group people together as the same, without regard to their individuality." Point out that statements beginning with "all" may be good examples of stereotyping.

Practice: Pick a group that is often stereotyped, make a typical stereotyped statement, and ask students: How do you think this kind of stereotype affects:

- The relationships between members of particular groups?
- People's job opportunities?
- People's educational opportunities?

Separate students into pairs. Give each pair a copy of the worksheet "Why do you think I'm a_____?" After they finish the worksheets, students should discuss the reasons why they described the people as they did.

Have students complete the worksheet "Can you Identify Stereotypes?" After they finish the worksheets, ask the students to discuss the statements and explain why each one is or is not an example of a stereotype.

Students should complete the worksheet "What Do You Think About Them?" Discuss the written statements, identifying which are factual and which stereotypical. Also discuss reasons why some people believe in stereotypes.

Objective 8: (continued)

Evaluation:

Separate students into groups of two or three. Each group should choose three stereotypes and discuss ways to change these stereotypes.

After the groups have finished the activity, have them share their stereotypes and possible solutions with the class.

Have the groups discuss how stereotypes interfere with effective communication. For example, if you were a hearing person who thought all deaf people were dumb, how would you talk to deaf individuals? Would this stereotype interfere with effective communication?

Base individual student evaluations on class participation and level of discussion.

Teaching Tips:

For "Why Do You Think I'm a _____?" find photos of a wide variety of people--all ages and racial backgrounds, both sexes. Choose non-stereotypical people for each job area.

For instance, you might designate a black woman for the doctor; an older man as the nurse; a young white woman as the maid, a young man as the librarian.

Give each picture a letter, and write the occupation on the back.

UNIT IV. INTERPERSONAL COMMUNICATION

Student Worksheet
Why Do You Think I'm a _____?

Name:_____ Date:_____

Choose one person that you think has each job. Write the letter of the picture next to the job.

1._____ doctor

2._____ movie star

3._____ teacher

4._____ basketball player

5._____ mechanic

6._____ maid

7._____ librarian

8._____ nurse

UNIT IV. INTERPERSONAL COMMUNICATION

Student Worksheet
Can You Identify Stereotypes?

Name:_____Date:_____

Write the letter S next to the statements that are stereotypes.

1._____ Men drive better than women.

2._____ Hearing people don't know how to sign.

3._____ My boyfriend is very handsome.

4._____ Teenagers with long hair are dirty.

5._____ My grandmother can't remember things very well.

6._____ Deaf people are excellent drivers.

7._____ My father is smarter than my mother.

8._____ Mrs. Brown is a good cook.

9._____ Deaf people can't talk.

UNIT IV. INTERPERSONAL COMMUNICATION

Student Worksheet
What Do You Think About Them?

Name:_____Date:_____

List common stereotypes about the following groups:

A. Black People

1.

2.

3.

B. White People

1.

2.

3.

C. Hearing People

1.

2.

3.

D. Deaf People

1.

2.

3.

E. Women

1.

2.

3.

F. Men

1.

2.

3.

G. Old People

1.

2.

3.

H. Teenagers

1.

2.

3.

UNIT IV. INTERPERSONAL COMMUNICATION

Bibliography and Resources

Books, Textbooks

Austin, A., et al., Introduction to Communication, 2nd ed. Rochester, NY: Rochester Institute of Technology, 1978.

Bondanza, Julie, The New Assertive You. Washington, DC: Outreach, Gallaudet Pre-College Programs, 1984.

Clark, T., Beck, D. & Cornett, M. Is That You Out There? Exploring Authentic Communication. Columbus, Ohio: Charles L. Merrill, 1973.

Knapp, M. Nonverbal Communication in Human Interaction. New York: Holt, Rinehart & Winston, Inc., 1972.

Olsen, Harry, Skills for Living. Outreach, Gallaudet Pre-College Programs, 1983.

Stanford, G. & Stanford, B. Learning Discussion Skills Through Games. New York: Citation Press, 1969.

Films

The following films have been reviewed by the developers of this course. Many may be appropriate for your students:

Anger and How to Cope With it
Clearing up Misunderstandings
I'm Not Stupid
Courtesy, Who Needs It
Disorderly Worker
False Assumptions
Getting Angry
Shopping Bag Lady
Transformation of Mabel Wells
A Weekend Visit
William: From Georgia to Harlem
How to Keep a Job
Communicating with your Doctor
Communicating with your Lawyer
Bias: A Four-Letter Word
Eating in a Restaurant
Fairness for Beginners
Let's Have a Party
Let's Play Fair
Quiet Please

A catalog listing these and other films is available from:

Educational Captioned Films for the Deaf
Superintendent of Documents
U.S. Government Printing Office
Washington, DC 20402

Films may be ordered directly from:

Captioned Films for the Deaf
Distribution Center
624 E. Walnut Street, Suite 223
Indianapolis, IN 46202

General information is available from:

Captioned Films for the Deaf
5000 Park Street North
St. Petersburg, FL 33709

Gallaudet College Library
Gallaudet College
Washington, DC 20002

UNIT V: COMMUNICATION DEVICES AND SUPPORT SERVICES

Objective 1: Students will be able to identify Telecommunication Devices for the Deaf (TDDs) and to describe several types.

Introduction: Define the abbreviations TDD and TTY, as follows:

TDD means Telecommunication Device for the Deaf. This term includes all models.

TTY means teletypewriter, an early, stationary type of TDD. Very few real TTYs are still in use. Small, portable TDDs are more familiar and widely used.

Instruction: Lead a discussion of the various models of TDDs, based on information in the TDD factsheet. Use real TDDs as models, if possible, and try to get current brochures from TDD manufacturers. Encourage students to share their own information and experiences with TDDs.

Practice: Using the information about TDDs, divide students into teams of two or three and ask each team to select a TDD model they would prefer to purchase. Teams should share the reasons for their selections with the class.

Evaluation: Students should be able to list features of all the TDD models studied in class.

Teaching Tips: Before teaching this lesson, ask local TDD dealers or write to TDD manufacturers for current literature and product catalogs (addresses at the end of this unit).

UNIT V: COMMUNICATION DEVICES
AND SUPPORT SERVICES

TDD Factsheet

TDD is an abbreviation that stands for Telecommunication Device for the Deaf. The TDD uses a combination of a typewriter keyboard, telephone, and visual display to enable people with hearing losses to communicate by telephone.

There are three basic categories of TDDs: stationary models, often called TTYs; portable models that offer a choice of visual screen display or paper copy; and portable models with screen display only.

Stationary TDDs

This is the largest and oldest type of telecommunications device. It differs from most current models in several ways.

Stationary TDDs are large, heavy, and very sturdy. A stationary model may work well in a public or semi-public area, like a library, police station, or dormitory. It is difficult to move or carry. It does not have a screen display, but records conversations on roll paper that is inexpensive and easy to purchase.

On the other hand, a stationary TDD takes up a lot of floor space, and makes a lot of noise while it is being used. Its large size and weight may prevent theft, but it is hard to move around and may not be convenient. This model may also require expensive maintenance, since it cannot be taken in for repairs. A large stationary TDD may cost from $400 to $700.

Portable TDD with Visual Display and Paper Copy

This type of TDD is very popular, because it is small and lightweight, and can make paper copies of conversations. The paper used for this type is small and narrow, sometimes making recorded conversations hard to read. Many of these models can be used in telephone booths, and some have capability to communicate with personal computers.

The price, keyboard size, and clarity of visual displays will vary, depending on the model. Generally, more expensive models are clearer and easier to use. Prices for this type run from $250 to $600.

Portable TDD with Visual Display Only

This type is very much like the models described above, but does not make paper copies of conversations. Some models can be used with public telephones, and some can "talk to" computers. Some models of this type can be connected to a printer when a paper copy is needed.

These TDDs are portable, convenient, and lightweight; usually lower in price than models with built-in printers. Keyboard and visual displays will vary in different models. They cost from about $140 to $300.

UNIT V: COMMUNICATION DEVICES
AND SUPPORT SERVICES

Objective 2: Students will identify the parts of a TDD and describe their functions.

Introduction: Using a transparency, a brochure, or a TDD, identify the following parts:

- Coupler or receiver cradle (in some models these are separate; in others they are built in).
- Signal light.
- Power light.
- Off/On switch.
- Special function keys: return, line feed, figures, letters, and GA/SK.

Instruction: Demonstrate the following parts and their functions:

- Off/On switch to start or end use of the TDD.
- Return key to go back to the left margin of the next line.
- Line feed to move to the left margin, one line below the last typed line.
- Figs key to type numbers or symbols--the tops of the keys.
- Letters to type letters--the bottoms of the keys.
- Some models have GA and SK keys. GA means "Go Ahead," giving the other party a chance to type. SK means "Sign Kill," an old teletype signal for goodbye.

TDDs have three different kinds of light signals:

- Dial tone: when the phone receiver is put on the cradle, the signal light will go on and shine steadily. That means the line is free and you can dial a number.
- Phone ringing: after you dial the number you want, the signal light may shine on and off steadily and rhythmically. That indicates the phone is ringing.
- Busy signal: if you finish dialing and the light flashes rapidly on and off, that means the line is busy. You should hang up and try again later.

Practice: Have sudents complete the TTY worksheet, describing the pats and their functions. If a TDD is available, studens can practice making calls, using various keys.

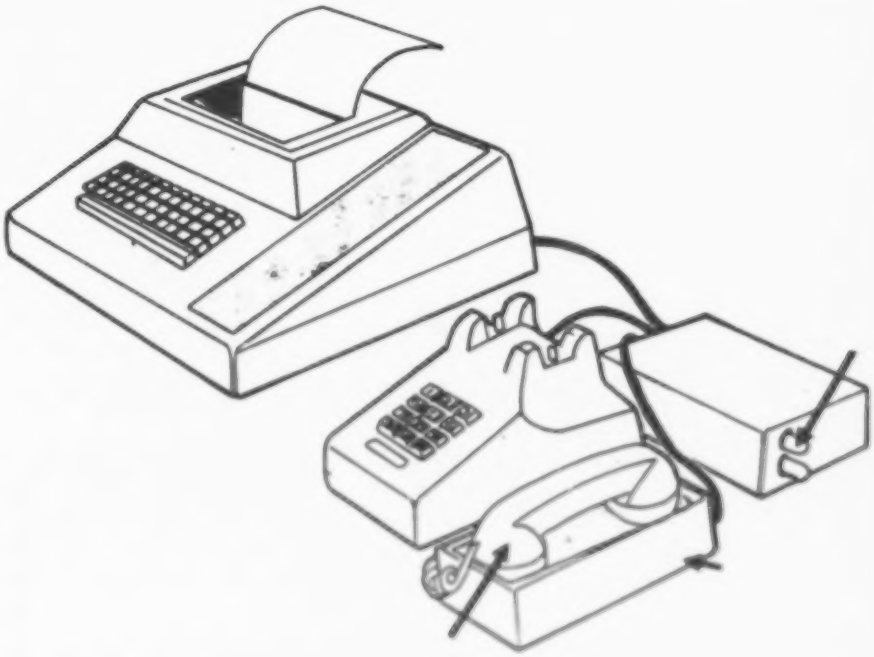
Evaluation: Studens should identify the parts of the TDD and explai their functions to the class.

UNIT V: COMMUNICATION DEVICES
AND SUPPORT SERVICES

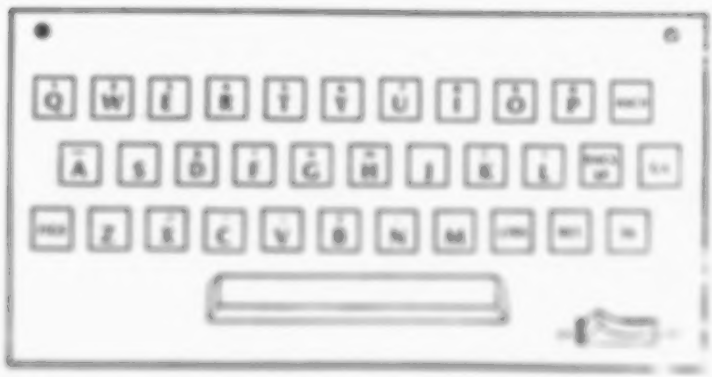
Worksheet: Parts of a TDD

Use the pictures below to identify the parts of a TDD and its keyboard.

1. Parts of a TDD
   a. Signal Lights
   b. Telephone Receiver
   c. Coupler or cradle



2. Keyboard
   d. RET-
   e. Figs
   f. LTRS
   g. SK
   h. CA
   i. Back SP
   j. ASCII



UNIT V: COMMUNICATION DEVICES AND SUPPORT SERVICES

Objective 3: Students will be able to use a regular or TDI telephone directory to find the telephone number of a specified person, business, or institution.

Introduction: Circulate telephone books and TDI directories among members of the class.

Instruction: Demonstrate how both kinds of directories are organized (see Factsheet: Telephone/TDD Directories). Let students look through both directories and ask questions.

Practice: Discuss and compare the two types of directories and the way they are organized. Have students look at the front section of the local directory and become familiar with the kinds of information given there.

Students should complete worksheets on telephone directories, both white and yellow pages; abbreviations; and TDI directories.

Evaluation: Provide students with a list of personal or business names, and have them find the phone numbers and addresses in the regular and TDI phone books.

Teaching Tips: Bring enough TDI and telephone directories to class so students will have ample time to look them over and to find numbers as assigned.

UNIT V: COMMUNICATION DEVICES
AND SUPPORT SERVICES

Factsheet: Telephone and TDD Directories

Telephone Directories

The white pages of the telephone directory list names alphabetically by last name. You should know correct spelling of both first and last names, and possibly the street, to find numbers in the white pages. White pages also list businesses and government offices, sometimes in special sections.

Yellow pages list businesses, professions, and institutions by category. Within categories, individual listings are in alphabetical order. Guide words at the tops of directory pages tell which listings appear on that page.

The front section of most telephone directories gives all kinds of helpful information, for instance:

- o Emergency numbers.
- o Area codes for various states in the U.S.
- o How to call operators for help, both voice and TDD.
- o Where to get information on service, billing, etc.

TDI Directories

The International Telephone Directory of the Deaf is published annually by Telecommunications for the Deaf, Inc. (TDI). It contains names, addresses, and phone numbers for individuals, professionals, businesses, and organizations that have TDDs. It also lists interpreters and organizations for deaf people.

The TDI Directory is organized alphabetically by state, and divided into categories: residential and business listings, schools and colleges, etc. The directory can be purchased through TDI, Inc., for $10.

TDD Hotlines

Many local areas have TDD Hotlines. These are communication services, usually run by volunteers, that link people who use TDDs to people who have only voice phones.

For example, if Mr. Brown, a hearing impaired person, wants to make an appointment with a doctor, he can call the hotline service and specify when he needs the appointment. Mr. Brown stays on the TDD while the service uses a three-way connection to call the doctor's office and set up the appointment. Of course, Mr. Brown thanks the volunteer who helped him communicate with the doctor.

Hotlines are listed in the TDI, under National Crisis Center for the Deaf. They are toll-free calls.

UNIT V: COMMUNICATION DEVICES
AND SUPPORT SERVICES

Worksheet: White Pages or Yellow Pages?

Name_____ Date_____

The following people or businesses are listed in either the white or yellow pages of the telephone book. For each listing, write where you think you would find the number, either white pages, yellow pages, or both.

1. A store that sells motorcycles. _____
2. Your best friend. _____
3. A pet shop. _____
4. Your dentist. _____
5. Your doctor. _____
6. The police department. _____
7. A hearing aid dealer. _____
8. An airline company. _____
9. A florist shop. _____
10. Your father. _____

UNIT V: COMMUNICATION DEVICES
AND SUPPORT SERVICES

Worksheet: Using the Yellow Pages

Name_____ Date_____

1. It is your friend's birthday, and you want to send flowers. Find a place in the Yellow Pages that sells flowers.

   Name of store: _____

   Address: _____

   Phone Number: _____

2. Your doctor gives you a prescription for medicine. Find a place in the Yellow Pages that will fill prescriptions.

   Name of store: _____

   Address: _____

   Phone Number: _____

3. You are hungry for Chinese food. Find a chinese restaurant near school.

   Name of restaurant: _____

   Address: _____

   Phone Number: _____

4. Your television is broken. Find someone nearby who will fix it.

   Name of Business: _____

   Address: _____

   Telephone Number: _____

5. Your kitchen sink is clogged and water won't drain out. Find a plumber to fix the pipes.

   Name of plumber: _____

   Address: _____

   Phone Number: _____

6. Your hair is too long and messy, and you plan to apply for a job. Find a place where you can get a haircut.

   Name of store: _____

   Address: _____

   Phone Number: _____

7. Your hearing aid is not working right. Find a dealer to fix it.

   Name of dealer: _____

   Address: _____

   Phone Number: _____

UNIT V: COMMUNICATION DEVICES
AND SUPPORT SERVICES

Worksheet: Using the TDI Directory

Name_____ Date_____

Choose one state from the TDI directory and find the following:

What state did you choose? _____

1. One emergency number.

   Name: _____

   Address: _____

   TDD Number _____

2. One person living in your state.

   Name: _____

   Address: _____

   TDD Number _____

3. A school or college for the deaf.

   Name: _____

   Address: _____

   TDD Number _____

4. A vocational rehabilitation office.

   Name: _____

   Address: _____

   TDD Number _____

Using the TDI Directory (continued)

5. A doctor or a dentist.

   Name: _____

   Address: _____

   TDD Number _____

6. The registry of sign interpreters in your state.

   Name: _____

   Address: _____

   TDD Number _____

7. Someone to repair your TDD.

   Name: _____

   Address: _____

   TDD Number _____

8. The place to write for information about TDI directories.

   Name: _____

   Address: _____

   TDD Number _____

9. The TDD number for one airline.

   Name: _____

   Address: _____

   TDD Number _____

UNIT V: COMMUNICATION DEVICES
AND SUPPORT SERVICES

Worksheet: Telephone Directory Abbreviations

Name_____ Date_____

Definition: An abbreviation is a short way to write something.

1. Names are often abbreviated in the phone book to save space. Match the following abbreviations to the right names.

a.	Thos.	_____	Edward
b.	Chas.	_____	William
c.	Wm.	_____	Robert
d.	Robt.	_____	Thomas
e.	Jos.	_____	George
f.	Geo.	_____	Joseph
g.	Edw.	_____	Charles

2. The phone directory also abbreviates some addresses. Match these abbreviations to the right addresses.

a.	Dr.	_____	Park
b.	Blvd.	_____	Terrace
c.	St.	_____	Place
d.	Ln.	_____	Avenue
e.	Pl.	_____	Lane
f.	Rd.	_____	Street
h.	Ave.	_____	Road
i.	Ct.	_____	Drive
j.	Terr.	_____	Circle
k.	Pk.	_____	Court
l.	Cir.	_____	Boulevard

Telephone Directory Abbreviations (continued)

3. Street names are also sometimes abbreviated. Match the following:

a. Meadowvl	_____	Georgia
b. GA	_____	Pennsylvania
c. Beachvw	_____	Princeton
d. PA	_____	Meadowvale
e. Princtn	_____	Beachview

4. Phone books often abbreviate the names of cities, towns, and sections of a city. Match the following:

a. Balto.	_____	Washington, D.C.
b. Wash. DC	_____	Springfield
c. L.A.	_____	Baltimore
d. Sprngfld	_____	Los Angeles

UNIT V: COMMUNICATION DEVICES
AND SUPPORT SERVICES

Objective 4: Students will complete TDD calls using proper protocol.

Introduction: Tell the class that it is important to use proper protocol when using the telephone, either voice or TDD. Define protocol as appropriate manners and procedures.

Instruction: Lead a discussion of proper telephone behavior. Use the factsheet on telephone protocol.

Practice: Pairs of students, or teacher and students, should practice making TDD calls. Use blackboard or overhead projector and two colored pens, so that everyone can see that proper protocol is followed.

Evaluation: If a TDD is available, students should be assigned specific phone calls to complete, using proper protocol. Each student should be given a sheet with one or more local or toll-free numbers to call. Include questions to ask or requests to be made.

If TDDs are not available for student use, substitute blackboard or paper conversations. Teacher should role play the person receiving the call.

Teaching Tips: Numbers for assigned calls may be found in the TDI directory.

Use such questions as: Is this book available in the library? What is the cost of a flight from San Francisco to Chicago? Please send me a copy of your course catalog.)

UNIT V: COMMUNICATION DEVICES
AND SUPPORT SERVICES

Factsheet: Proper Telephone Protocol

Protocol for Voice Telephones:

- The proper way to answer a voice telephone call is to say "hello." Hearing people often recognize voices on the telephone, but it is good protocol for both the caller and the person receiving the call to identify themselves.

- If you do not hear well on the telephone and a TDD is available, ask if the other party can transfer to a TDD. If not, ask the person to call back from a TDD, or when someone else can take the call.

- If you understand most things said on the phone, you can use repair techniques for the things you do not hear, just as you do in face-to-face conversations.

  "I'm sorry, could you repeat that please?"
  "I'll meet you at what time?"
  "Let me repeat that so I'll be sure it's correct."

- End telephone calls by saying goodbye, and often with a goodbye phrase like "See you later" "Thanks for calling" "Good luck on your exams."

Protocol for TDD Calls

- It is important to identify yourself when answering a TDD call: "Hi, this is Bob GA." "Ann here GA." "Robin on GA."

- GA means Go Ahead, meaning it is the other person's turn to begin typing. Do not interrupt when someone else is typing on a TDD; wait until the GA appears on the screen or paper.

- To end a TDD call, type a goodbye phrase, then GA to SK. This lets the other person know you are ready to end the call. The other person can continue if there is more to say, or type SK to end the call. You can use the same kinds of goodbye phrases used on voice phone.

- Some people use abbreviations for TDD conversations, for instance:

U	=	you.	HD	=	hold, or wait a minute.
R	=	are.	PLS	=	please.
TY	=	thank you.	RPT	=	repeat.
Q	=	instead of a question mark at the end of a question.			

  Do not use abbreviations unless you are sure the other person understands what they mean.

UNIT V: COMMUNICATION DEVICES AND SUPPORT SERVICES

Objective 5: Students will be able to decide when they need an interpreter and be able to locate one on their own.

Introduction: Start a discussion by asking the class, "What is an interpreter?" Be sure to cover the following points.

An interpreter is a person who:

- o Listens to hearing people speak, and signs the messages for deaf people.
- o Watches deaf people sign, and repeats the messages with voice for hearing people.
- o Listens to hearing people and mouths the message to oral deaf people.

There are several different kinds of interpreters:

- o Some interpreters sign only American Sign Language (ASL).
- o Some sign only English.
- o Some do not sign, but mouth the language for lipreading.
- o Some only interpret ASL to voice.
- o Some only interpret Signed English to voice.
- o Some interpreters can do all of the above.

Instruction: Ask the class to identify various situations in which they might need an interpreter, for instance:

- o Buying a house or a car.
- o Talking to doctors or hospital personnel.
- o University or mainstream classes.
- o Meetings or conventions.
- o Courts of Law.
- o Job interviews.
- o Religious services.
- o Theatrical productions or political speeches.

Discuss local places where interpreters might be contacted:

- o Registry of Interpreters for the Deaf (RID).
- o Deaf clubs and organizations.
- o Schools for the deaf.

Invite speakers to the class, either certified interpreters who can discuss what they do, or deaf people who have used interpreters.

Objective 5 (continued)

Practice: Play a game in which students choose situation cards. Players have to decide whether an interpreter is needed in a given situation, and what type of communication is required: oral, sign-to-voice, voice to ASL, etc.

For each situation, have students determine the type of certification needed, what the interpreter will be expected to do, and the cost of the service.

Evaluation: Students should write brief papers in which they explain what an interpreter is and does, when an interpreter is needed, and where to find an interpreter locally.

Teaching Tips: Prepare a set of cards with various situations, some of which would require the services of an interpreter. Use the list of situations on page 96 as a guide. Including a few funny situations can make the game more enjoyable.

UNIT V: COMMUNICATION DEVICES
AND SUPPORT SERVICES

Objective 6: Students will be able to identify correct and incorrect behavior in situations involving a hearing impaired consumer and an interpreter.

Introduction: Define the Registry of Interpreters for the Deaf (RID) as an organization that certifies and supplies interpreters for deaf people. Discuss the importance of knowing one's responsibilities when using an interpreter. Make it clear that interpreters also have responsibilities.

Instruction: Discuss examples of correct and incorrect interpreting behavior (use the teacher resource). Clarify the responsibilities of both parties. Invite an interpreter to be part of the discussion, if possible.

Responsibilities of consumers:

- Describe the interpreting situation accurately, including any relevant information--a college or school course, an all-day meeting, heavy use of ASL, etc.
- Agree on a fee before the assignment.
- Let the interpreter know if you do not understand something and need it repeated.
- Evaluate the interpreter accurately and fairly after the assignment (interpreters want this feedback).

Responsibilities of interpreters:

- Keep all information confidential.
- Use language understood by the deaf consumer.
- Never change the meaning of what is said or signed.
- Never give personal comments or advice.
- Be aware of personal skill limitations and do not accept assignments beyond those capabilities.
- Dress appropriately in solid colors that contrast with skin color, so hands will be clearly visible.

Practice: Have students take turns role playing correct and incorrect interpreting behavior for class to identify.

Evaluation: Students should observe interpreting situations (role play, real, or videotape) and identify (on paper) correct and incorrect behavior by consumers and interpreters.

Teacher Resource: Interpreting Procedures

Examples of Correct Interpreting Behavior:

1. The deaf consumer introduces both himself and the interpreter to his doctor, boss, teacher, etc.
2. The deaf consumer and the interpreter discuss and agree on the fee before the interpreting date.
3. The deaf consumer explains to the interpreter the type of vocabulary that will be needed for the interpreting situation.
4. During the assignment, the deaf consumer asks the interpreter to repeat something she did not understand the first time.
5. While communicating, the deaf consumer looks at the person he is addressing, not at the interpreter.

Examples of Incorrect Interpreting Behavior:

1. The interpreter wears a bright plaid shirt.
2. During a job interview, the interpreter advises the deaf consumer what salary to ask for.
3. During a criminal court hearing, the deaf consumer confesses to the interpreter and asks her advice.
4. The interpreter talks to someone on the phone without signing to let the deaf consumer know what is happening.
5. The interpreter tells a friend about something he learned about the deaf consumer during an interpreting assignment.
6. After a doctor visit, the deaf consumer asks the interpreter, "How often do I take the medicine?"

UNIT V: COMMUNICATION DEVICES AND SUPPORT SERVICES

Objective 7: Students will identify and describe the various devices and aids that can alert deaf people to environmental sounds and dangerous situations.

Introduction: Show pictures, slides, or examples of the following:

- o Flashing alarm clocks
- o Vibrating alarms
- o Flashing smoke detectors
- o Flashing doorbells
- o Flashing telephone alarms
- o Baby cry light alarms
- o Hearing ear dogs

Instruction: Discuss use of warning devices and aids, demonstrating them wherever possible.

Practice: Ask students to identify pictures or models of the various aids and devices, and describe how they are used.

Lead a class discussion of what deaf people did before these warning systems were available.

Evaluation: Students should complete the worksheet on alerting devices and aids.

UNIT V: COMMUNICATION DEVICES
AND SUPPORT SERVICES

Worksheet: Alerting Devices and Aids

Name _____ Date _____

Respond to each statement with True or False.

1. Dogs can be trained to let their deaf owners know when the telephone is ringing. _____
2. For people who find it difficult to wake up in the morning, a vibrating alarm might a good idea. _____
3. All smoke detectors have flashing lights. _____
4. Some deaf people have lights connected to the doorbell that flash when someone rings the bell. _____
5. Blind people often use hearing ear dogs. _____
6. A deaf family can buy a baby cry light alarm to let them know when their child is crying. _____
7. Telephones are always equipped with flashing lights. _____
8. Deaf people can use any alerting device that is made for hearing people. _____

UNIT V: COMMUNICATION DEVICES AND SUPPORT SERVICES

Objective 8: Students will be able to identify and describe the devices and aids available to deaf people for education and entertainment.

Introduction: Show pictures, slides, or actual models of the following:

- o Captioning decoders.
- o Captioned films.
- o Captioned videotapes or TV programs.

Instruction: Discuss the uses of the aids for education and entertainment. If possible, demonstrate their use.

Practice: Ask students to identify pictures or models of the various educational/entertainment devices, and describe how they are used.

Have students find out who pays for captioning the TV programs they watch. Each student should choose at least one program to research. They can either watch at the beginning or end of captioned programs to see who sponsored the captioning, or write to the National Captioning Institute for the information.

Evaluation: Students should complete the worksheet on entertainment/educational devices and aids.

UNIT V: COMMUNICATION DEVICES AND SUPPORT SERVICES

Worksheet: Entertainment/Educational Aids

Name _____ Date _____

1. Why do deaf people buy TV captioning decoders?

2. How do decoders help deaf people stay well informed?

3. How do you know when a TV program has closed captions?

4. Look at your local TV schedule and list five CC programs for a given day.

   a._____ d._____

   b._____ e._____

   c._____

5. Check the kinds of TV programs you have seen with closed captions.

   _____ Movies _____ Serials (like Dynasty, Dallas)

   _____ Advertisements _____ Political Speeches

   _____ Cartoons _____ Weather Reports

   _____ Religious Programs _____ Other _____

6. Who pays to have TV programs captioned?

6. Where can you see captioned films?

7. Who pays to have films captioned?

8. Why would hearing people go see captioned films?

Information on Communication Devices and Support Services

The National Association of the Deaf (NAD) is a good source of information on devices, aids, and services for deaf people. It also includes the national Registry of Interpreters for the Deaf (RID), and Captioned Films for the Deaf Distribution Center. The address is:

The National Association of the Deaf
814 Thayer Ave.
Silver Spring, MD 20910

Check local TDI directories for chapters of NAD and associated organizations in your area. Information on specific devices and brand names may also be obtained from the manufacturers and distributors listed below and on page 105.

Textbooks

Deyo, David, On My Own: Assistive Devices for Deaf and Hard of Hearing Students. Washington, DC: Outreach, Gallaudet Pre-College Programs, 1984.

Deyo, David, Ring/Flash (use of telephone and TDD for students). Washington, DC: Outreach, Gallaudet Pre-College Programs, 1985.

Sources for TDDs, Alerting Devices, and Aids

Signal Devices, Etc.

HAL-HEN Co, Inc.
25-53 24th St.
Long Island City, NY 11106

Mid-Audio, Inc.
120 West Ogden
Hinsdale, IL 60521

Sonic Alert, Inc.
209 Voorheis
Pontiac, MI 48053

Sound Barrier, Inc.
401-417 Fayette Ave.
Springfield, IL 61704

Vibralite Products, Inc.
PO Box 23578
Ft. Lauderdale, FL 33307

Sources for TDDs, Alerting Devices, and Aids (continued)

TDD and Telecommunications

American Communication Corp.
180 Roberts St.
E. Hartford, CN 06108

C-Phone, Inc.
553 Wolfner Dr.
Fenton, MI 63020

CYBERTECH, Inc.,
PO Box 543
Thornhill, Ontario
Canada L3T 4A2

Krown Research, Inc.
6300 Arizona Circle
Los Angeles, CA 90045

Nationwide Flashing Signal System
8120 Fenton St.
Silver Spring, MD 20910

Northern Telecom, Inc.
640 Massman Dr.
Nashville, TN 37210

Plantronics
345 Encinal St.
Santa Cruz, CA 95060

Potomac Telecom
1010 Rockville Pike
Rockville, MD 20852

Precision Controls, Inc.
5 Thomas Rd. South
Hawthorne, NJ 07506

Radio Shack International
500 One Tandy Center
Fort Worth, TX 76102
(check local stores)

Sonic Alert, Inc.
209 Voorheis
Pontiac, MI 48053

Sound Barrier, Inc.
401-417 Fayette Ave.
Springfield, IL 61704

Specialized Systems, Inc.
11339 Sorrento Valley Rd.
San Diego, CA 92121

TTY Inc.
202 Lexington Ave.
Hackensack, NJ 07410

Ultratech, Inc.
PO Box 4062
Madison, WI 53711

Weitbrect Communications
655 Skyway
San Carlos, CA 94070

Captioning: Video, Films

National Captioning Institute
5203 Leesburg Pike
Falls Church, VA 22041

Sears, Roebuck (decoders)
1633 Broadway
New York, NY 10019
(check local listings)

Hearing Ear Dogs

Hearing Dog Programs
American Humane Society
5351 Roslyn St.
Englewood, CO 80110

Red Acre Farm
109 Red Acre Rd.
Stowe, MA 01775

TDD Directories

Telecommunications for the Deaf
814 Thayer Ave.
Silver Spring, MD 20910

UNIT VI
DEAF AWARENESS

Objective 1: Students will study and discuss the lives of deaf people in early history.

Introduction: Ask students how they think deaf people were treated 2000, 3000, 5000 years ago.

Instruction: Discuss the treatment of deaf people in early historic periods; include the information provided in Factsheet 1 on page 108.

Practice: Ask students to form groups of two or three, and to research and report to the class on some aspect of the history and early treatment of deaf people.

Evaluation: Students might demonstrate the lives of deaf people in historic ages by researching given periods and writing about them or by preparing and giving skits. Evaluate the quality of the research, and the presentation of information to the class.

Factsheet 1
Early History of Deaf Education

The Hebrew People in Ancient Israel

During the early historic period (3000 BC) the Jewish people (Hebrews) were kind to deaf people and people with other disabilities. They believed that God cared about everyone and they felt responsible for handicapped people.

Many Hebrews thought deaf people were like children, and could not learn. They had special laws for deaf people. Deaf people could not own land, and they were not punished when they did wrong, because they were not considered responsible for their actions.

We do know that deaf people in ancient Israel used sign language. Early Hebrew laws permitted "marriage by sign." There is no record of the sign language they used.

Greek and Roman Civilizations

Later, the Romans and the Greeks also had laws for deaf people, and treated them well. The Roman laws differed for deaf people who could read, write and speak. Deaf people who could read and write were treated the same as hearing people. But a deaf person who never learned to read, write, and speak, had to have a guardian. This law was made to protect deaf people.

The Greeks had similar laws. Since no one knew how to teach the deaf, there were no schools for deaf children. In ancient times, people who were born deaf or became deaf very young probably never learned to read and write.

What Did Aristotle Mean?

There is no record of any schools for the deaf until the 16th century. One reason for this was may have been the teaching of a famous Greek philosopher named Aristotle. Aristotle was a great teacher; people came from many places to hear him speak. Aristotle had observed the deaf and he said, "Those who are born deaf are also speechless."

Some people misunderstood what Aristotle said. They believed Aristotle meant that deaf people lacked intelligence and could not learn. For centuries, no one ever tried to teach the deaf. This idea was harmful to deaf children. But what Aristotle actually said is true. People who are born deaf do not learn to speak unless they have special training.

Although there were no schools for the deaf, most deaf children must have learned at home as other children did. They probably learned how to do the kinds of work their parents did, and how to communicate in some ways with their families.

UNIT VI. DEAF AWARENESS

Objective 2. Students will study the evolution of various communication methods and educational approaches for deaf people.

Introduction: Ask students what they know about the beginnings of education of the deaf. Use questions to generate the discussion, including the following:

Where did education of the deaf first start?
Did deaf people go to school when there were no schools for the deaf in America?
What methods were used to teach deaf students?
How did education of the deaf begin in the US?
What is oralism? What is manualism?
How and why did the oral-manual controversy start?
What is Public Law 94-142; how does it affect deaf students?

Instruction: Review the history of education of the deaf, discussing the lack of schools for deaf children during the early historic ages, and including the information on Factsheet 2: The Beginning of Schools for the Deaf.

Define the following communication terms in class:

Oralism: the use of speech, speechreading, and hearing aids for communication, without the use of signs.
Manualism: the use of some form of sign communication.
Simultaneous Communication: using speech and sign at the same time.
Total Communication: the philosophy of using any and all modes of communication, including speech, speechreading, auditory input, signs, reading, writing, mime, and drawing.

Practice: Have students debate how and why the oral-manual controversy started. Discuss the pros and cons of both theories.

Assign students to learn how many schools for the deaf there are in their home states. Each student should select two or three schools for the deaf and find out the methods of communication used in those schools.

Evaluation: Have the class debate the question of oralism vs. manualism, with respect for each others' opinions.

Students should answer the following question, verbally or in writing: "If your children were deaf, how would you prefer that they be educated?"

Factsheet 2
The Beginning of Schools for the Deaf

Learning to Teach the Deaf

Many years ago, deaf people probably learned from their families how to work in the fields or at home. The first formal education of deaf people that we know about took place in a monastery. The monks in this monastery took a vow of silence. All daily communication was done in sign language and finger spelling. The sign language was more than 900 years old when a monk named Pedro Ponce de Leon decided to use it to educate deaf sons of rich families.

The Abbe de L'Epee and the Oral-Manual Controversy

Later, schools for the deaf were started in England, France, Germany, and other European countries. In France, Abbe Charles Michel de L'Epee started the first free school for the deaf in the world. He knew sign language and used it to communicate with his students. The schools in England and Germany used the oral method of communication.

Abbe de l'Epee and a German teacher, Samuel Heinicke, disagreed about the best way to communicate with and teach deaf students. The Abbe believed in using sign language; Heinicke believed deaf students had to learn to read lips and to speak. He thought sign language was bad, because it would stop deaf children from learning to speak. This argument lead to the oral-manual controversy that still exists today.

Thomas Hopkins Gallaudet and the American School

The first permanent school for the deaf in America was started in 1817 by Thomas Hopkins Gallaudet, in Hartford, Connecticut. It is now called the American School for the Deaf.

Gallaudet went to England to learn how to teach deaf children, but the English teachers would not help him. They wanted to keep their methods secret. Gallaudet then went to France where he learned French sign language. He brought it back to America to use in his school. Gallaudet also brought a teacher from France to help him start the school. This teacher was Laurent Clerc, a deaf man. He was the first deaf person to teach in America.

Alice Cogswell was the first deaf child Thomas Hopkins Gallaudet taught. There is a statue of Thomas Hopkins Gallaudet and Alice Cogswell in front of Chapel Hall at Gallaudet College and one at the American School for the Deaf.

Edward Miner Gallaudet and the Columbia Institute

Edward Miner Gallaudet was the youngest son of Thomas Hopkins Gallaudet. He followed his father's career in education of the deaf. He taught in

the American School for the Deaf for several years. Then in 1857, he was asked to come to Washington, DC to be principal of a new school for deaf and blind students. That school was the beginning of the Kendall Demonstration Elementary School (KDES).

Edward Gallaudet and his father had talked many times about the need for a college for deaf students. Finally, on April 8, 1864, President Abraham Lincoln signed a bill that established the National Deaf Mute College (later renamed Gallaudet College). It was the first college for deaf people in the world. Edward Miner Gallaudet was president of the college for 46 years.

More Schools for the Deaf

After the American School for the Deaf (ASD) was established in 1817, other states opened their own schools for the deaf. Soon there were schools in New York, Ohio, Pennsylvania, and Kentucky. Those schools followed the ASD methods of teaching, using sign language and finger spelling. There were no speech or speechreading classes in the early schools.

In 1867 the first completely oral school in America was established in New York. It is now called the Lexington School for the Deaf. A short time later a second oral school opened: the Clarke School for the Deaf in Massachusetts.

Alexander Graham Bell and the Oral Method

Alexander Graham Bell invented the telephone, and he was also a speech teacher. He supported the oral method of teaching deaf students. He started an organization, now called the Alexander Graham Bell Association for the Deaf, to promote the oral method of communication.

Alexander Graham Bell and Edward Miner Gallaudet started out as friends. They both wanted to educate deaf children. Although they disagreed on methods of communication, this did not ruin their friendship at first. Later, their arguments grew bitter and they were no longer friends. Like the Abbe de L'Epee and Samuel Heinicke, Bell and Gallaudet carried on the oral-manual controversy about how to educate deaf people.

The oral-manual controversy has lasted for more than 100 years in the United States. Parents are often confused about which mode of communication is best for their deaf children. There are good arguments on both sides.

Oralism or Manualism?

Those who support oralism point out that most people use speech to communicate. Deaf children who cannot talk will not be able to communicate easily with most other people. This can prevent them from getting a good education and good jobs. They will also have limited social lives, because they will be comfortable only with other deaf people. The oralists also believe that if deaf children are allowed to sign, they will not learn to talk.

On the other hand, people who support manualism say deaf children learn better and faster through sign language. They claim that deaf people have a right to communicate easily in their own language.

For many years, people who believed in the oral method were very powerful in education of the deaf. Most deaf children were not allowed to use sign language in school, but they learned it from their friends and used it whenever they could. Deaf people kept sign language alive in America. Sign language was always taught and used at Gallaudet.

Total Communication

Today, very few schools for the deaf use only the oral method. Most schools use a method called Total Communication for teaching deaf children. Total communication means using every kind of method to communicate and to teach--sign, fingerspelling, speech and speech-reading, mime, drawing, reading and writing. Most educators find that deaf students learn best and live happier lives when they are encouraged to develop a wide variety of communication skills.

Factsheet on Public Law 94-142

Public Law 94-142 was passed by Congress in 1969. It provides that all handicapped children (ages 3-18) have a right to a free, appropriate public education. The states where students live are responsible for funding that education and for placing students in the "least restrictive educational environment."

Each child also has a right to an Individualized Education Plan, or IEP. Both academic coursework and appropriate special services are included in the IEP. The IEP should list both short and long term goals for the student. The plan is set up at a meeting that includes parents, students, teachers, counselors and other special services personnel. The child should also be present, if possible, as the IEP is being formulated.

There were good reasons for the implementation of PL-94-142. Before the law, many handicapped children were poorly educated or had no formal education at all. Some stayed at home. Others were placed in public school "special education" classrooms with children exhibiting a wide range of handicaps, or in regular classrooms with no special services. This law guarantees that deaf children will receive an appropriate education, without placing a financial burden on students and their families.

(See Parents' Guide to the IEP, published by Outreach, Gallaudet Pre-College Programs, 1986 edition.)

UNIT VI. DEAF AWARENESS

Objective 3: Students will identify the need for and functions of political organizations of and for deaf people.

Introduction: Discuss the role of advocacy as a reason for the establishment of various organizations of and for people who are deaf. Point out that the primary goal of political organizations is to obtain equality and power for their members.

Equality in employment means convincing employers that deaf workers are not liabilities and should have equal opportunity for employment. The National Association of the Deaf (NAD) prints on its envelopes: "Hire the Deaf - They're Good Workers!".

Equality in political representation means access to power in government.

Equality in the control of institutions that involve deaf people, such as schools and service organizations, helps insure that those institutions will truly serve deaf people.

Other goals include protecting the legal rights of the deaf, media exposure of sign language, and fostering public knowledge and acceptance of the history and culture of deaf people.

Discuss reasons why deaf people and other minorities must organize to accomplish these goals.

Instruction: Discuss the major organizations of and for deaf people as listed in the Teacher Resource Sheet.

National Association of the Deaf (NAD), and Junior NAD
National Fraternal Society of the Deaf
World Federation of the Deaf
DeafPride (local in Washington, DC)
Alexander Graham Bell Association of the Deaf

Practice: Have each student will pick an organization, research its purpose, and report to the class.

Evaluation: After studying several organizations each student should pick one group that he or she would like to join and describe the organization, the potential benefits they would expect, and the contributions they would be able to make.

Teaching Tips: Students may want to find out if there is an organization such as "Deafpride" in their area. Invite representatives of the listed organizations to class.

Factsheet on Organizations of Deaf People

The National Association of the Deaf (NAD)

Deaf people began to form state associations of their own in 1850. In 1880, a group of state associations joined together to form the National Association of the Deaf. Deaf people wanted a national organization, because they knew that they were the only people interested enough to solve their own problems. There were many problems that needed to be solved at that time.

- Education for deaf students.
- Manual vs. oral methods of teaching deaf students.
- Equal employment opportunities for deaf workers.
- Improved training for industrial work.
- A lack of public understanding of deafness and deaf people.
- Legal rights of deaf people.
- Prevention of discrimination against the deaf.

The National Association of the Deaf began in 1880 at the First National Convention of the Deaf in Cincinnati, OH. The first president of the NAD was Robert P. McGregor.

At the same time the NAD was organized, a meeting of the International Congress on Education of the Deaf was being held in Milan, Italy. At that meeting the International Congress voted not to use sign language as a method of teaching the deaf. Most members of the Congress were hearing, and many deaf people felt they had no right to make such an important decision without consulting deaf people. That decision had a serious impact on the education of deaf people for many years.

The main NAD office is now located in Silver Spring, MD. The NAD has 17,000 members and distributes two publications: The Deaf American, a monthly magazine, and The Broadcaster, a newspaper.

The Junior National Association for the Deaf (Jr. NAD)

In 1960, Jr. NAD was established to give young deaf people training in citizenship and leadership. Carolina H. Burns, wife of the NAD president in 1960, started Jr. NAD. In 1966, Jr. NAD opened an office at Gallaudet College.

In 1968, Jr. NAD held its first national convention, at Gallaudet College. That same year, Jr. NAD published the Junior Deaf American for the first time.

In 1969, Jr. NAD held its first annual four-week Youth Leadership Development Camp at Pine Lake Lodge in Stroudsburg, PA. In 1970 the camp was moved to Swan Lake Lodge in Pengilly, MN.

The World Federation of the Deaf (WFD)

The WFD began in 1951, at an internaional meeting in Rome, Italy. Deaf people from all over the world met to discuss their common problems. The WFD also works with the United Nations to help improve the lives of deaf people throughout the world. There are 57 national organizations of deaf people associated with the WFD. The WFD meets every four years in a different country.

The National Fraternal Society of the Deaf (FRAT)

FRAT was established in 1901 in Chicago, IL. At that time, deaf people had to pay a lot more money for insurance than hearing people. FRAT was established to provide insurance for deaf people at reasonable rates. At first, only men could belong to the FRAT, but now women may also join. In 1904 the FRAT publication was started. Today FRAT has more than 13,000 members.

Alexander Graham Bell Association for the Deaf

The A.G. Bell Association was established in 1890. Made up largely of hearing people, the Association strongly supports the use of speech-reading, residual hearing, and oral communication for deaf people, particularly children. Today, A.G. Bell has about 6000 members. The Association has two publications: Newsounds and the Volta Review.

DeafPride

DeafPride was established in 1972 in the Washington Metropolitan area, to work for human rights for deaf people and their families. DeafPride supports consumer education for deaf people and sets up agencies for legal advocacy. It also sponsors an interpreter referral service, and has certified interpreters on staff. Members receive the publication DeafPride: Papers, Perspectives and Options.

For more information about these organizations, write to:

National Association of the Deaf
(and Jr. NAD)
814 Thayer Avenue
Silver Spring, MD 20910

National Fraternal Society
of the Deaf
1300 W. Northwest Hwy.
Mt. Prospect, IL 60056

A. G. Bell Assn. for the Deaf
3417 Volta Place NW
Washington, DC 20007

World Federation of the Deaf
Congress Office
SF-00171 Helsinki, Finland

DeafPride, Inc.
2010 Rhode Island Avenue, N.E.
Washington, D.C. 20018

UNIT VI. DEAF AWARENESS

Objective 4: Students will identify various social organizations and activities of deaf people.

Introduction: Discuss reasons why people form social organizations, point out the differences between political and social organizations.

Instruction: Ask the class to generate a list of the types of social organizations established by deaf people, naming those they belong to. These may include:

Clubs of deaf people: There are approximately 300 clubs in the U.S. Many deaf people maintain social contact with each other by attending these clubs.

American Athletic Association of the Deaf (AAAD) was established in 1945 in Akron, Ohio. Approximately 175 local clubs are associated with the AAAD, which:

- o Fosters athletic competition among deaf clubs.
- o Serves as a parent organization for regional athletic associations.
- o Conducts an annual national basketball tournament.
- o Assists U.S. teams in the World Games for the Deaf.

World Games for the Deaf is limited to deaf athletes.

- o It is similar in organization to the Olympics.
- o Games are held every four years.

The National Theatre of the Deaf (NTD) uses deaf actors to sign and hearing actors to interpret.

- o It was formed in 1967 in Hartford, Connecticut.
- o The group has performed in 50 states and 16 countries.
- o The videotape "My Third Eye" was written and performed by the NTD.

Local theatre groups have been established by and for deaf people in several parts of the U.S. to write and perform plays, and to train deaf people for technical careers in theatre.

Practice: Ask students' opinions about the following question: Do deaf people and hearing people tend to participate in the same types of social activities?

Evaluation: Have students form teams. Each team should create an imaginary new organization of deaf people, defining its role and purposes.

UNIT VI. DEAF AWARENESS

Objective 5: Students will define culture.

Introduction: Write the word "culture" on the blackboard and lead a discussion, finishing with the following definition: "Culture includes the language, experiences, beliefs, foods, clothing, customs, values, religion, and behavior patterns of a group of people. Culture is passed on from one generation to another."

Instruction: Give examples of culture groups and help the class identify common languages, experiences, beliefs, customs, values, and behavior patterns of each group. For example:

Japanese culture: belief--Shinto religion.
Values--family, education, beauty, respect for the elderly.
Customs--removing shoes before entering house.
Language--Japanese.
Behavior--bowing when greeting someone, arranged marriages, eating with chopsticks.

Practice: Have students discuss the following questions:

- How do people acquire culture?
- What is culture shock?
- Do deaf students who transfer from public schools to residential schools experience culture shock?
- Do deaf graduates of residential schools suffer culture shock when they enter the hearing world?

Invite someone from a different culture to talk to the class about his or her background.

Evaluation: Students will explain their individual definitions of culture to the class, using comparative examples to support their definitions.

UNIT VI. DEAF AWARENESS

Objective 6: Students will develop awareness of various ideas and perspectives in deaf culture.

Introduction: Lead a discussion about the deaf culture and the deaf community. Include the following points.

Some people believe there is a deaf culture. Others do not believe deaf culture exists. Have students list things deaf people involved in the deaf community have in common.

Experiences and customs:
- o Hearing loss
- o Language--ASL
- o Experiences--problems in hearing society, school, family communication, hearing tests
- o Behavior--deaf people tend to use more facial expressions and body language in communication.
- o May change signs when hearing people are present, use more voice and less expression.
- o Use different greeting rituals.
- o Teasing and jokes (deaf people can pick up the "tone" of jokes told by other deaf individuals more easily).
- o Storytelling.

Values and beliefs:.
- o Place less value on speech than hearing people do.
- o Cultural values and beliefs are taught through ASL.

Reasons some people believe there is no deaf culture:
- o No specific foods, clothing, religion among deaf people.

Practice: Have the class discuss the following questions:

- o Is there a deaf culture?
- o Who belongs to the deaf culture?
- o Does membership in the deaf culture depend on degree of hearing loss?
- o Can hearing people belong to the deaf culture?
- o Can a deaf person raised in the hearing culture become a member of the deaf culture?
- o Can a deaf person go back and forth between cultures?
- o What are the problems of moving between cultures?

Evaluation: Have the class debate the existence of deaf culture.

Teaching Tips: Videotapes from A Handful of Stories may be shown.

UNIT VI. DEAF AWARENESS

Objective 7: Students will identify American Sign Language (ASL) as the language of American deaf culture.

Instruction: Discuss ASL and help students explain what it is. Use information from the Factsheet on ASL.

Practice: Invite a deaf adult whose native language is ASL to talk to the class on the changing role of ASL in deaf culture. Cover the following points.

- o ASL is gaining more acceptance as the language of the deaf by both deaf and hearing people.
- o Linguists accept ASL as a discrete language; many universities now offer ASL as fulfillment of a second language requirement.
- o ASL is more visible than ever before on television, in theater and in the public domain in general.
- o Wide acceptance of ASL is a relatively new phenomenon.
- o Many deaf people are proud of ASL as the language of their culture.

Evaluation: Have students write paragraphs, explaining what ASL means and why it is so important to deaf people.

Factsheet on American Sign Language (ASL)

ASL is a visual-gestural language created and used by deaf people in the United States. The gestures used in ASL are called signs. They are organized into specific grammar and syntactic structures.

It is important to emphasize that ASL is not "bad" English, or a short form of the spoken language. It is a language with its own syntactic structures. (Teachers may want to give examples comparing ASL and signed English).

Much of ASL is based on French sign language, which was brought to the U.S. in 1817 by Thomas H. Gallaudet. There is strong evidence to suggest that deaf people in the U.S. were using some form of signed language in the 1700s.

ASL has played an important historic role in deaf culture. ASL provides a way for deaf people to share their thoughts, experiences and values. It enables deaf people to pass on their culture from generation to generation. Deaf people tend to preserve ASL by using it only among themselves. Possible reasons for this are summed up in a quote from Dr. Barbara Kannapell.

> "It is important to understand that ASL is the only thing we have that belongs to deaf people completely. It is the only thing that has grown out of the deaf group. Maybe we are afraid to share our language with hearing people. Maybe our group identity will disappear once hearing people know ASL. Also, will hearing people dominate deaf people more than before if they learn ASL?"

References and Bibliography

Strongly Recommended:

Kannapell, B., "Inside the Deaf Community," in Deaf American, 1982, 34.

Padden, C., "The Deaf Community and the Culture of Deaf People," in C. Baker and R. Battison (eds.), Sign Language and the Deaf Community: Essays in Honor of William C. Stokoe. Silver Spring, MD: National Association of the Deaf, 1980.

Val, Sarah, None So Deaf, student book and teacher guide. Washington, DC: Outreach, Pre-College Programs, 1985.

Additional Books and Journal Articles

Baker, C. and Cokely, D., American Sign Language: A Teacher's Resource Text on Grammar and Culture. Silver Spring, MD: T.J. Publishers Inc., 1980.

_____, American Sign Language: A Teacher's Resource Text on Curriculum, Methods, and Evaluation. Silver Spring, MD: T.J. Publishers, Inc., 1980.

Bender, R., Conquest of Deafness. Cleveland, OH: Western Reserve University Press, 1960.

Bowe, F. and Sternberg, N., I'm Deaf Too: Twelve Deaf Americans. Silver Spring, MD: National Association of the Deaf, 1973.

Braddock C., Notable Deaf Persons. Washington, DC: Gallaudet College Alumni Association, 1975.

Cohen, O., "The Deaf Adolescent: Who am I?" in Volta Review. Sept. 19, 1978, Vol. 80, No. 5.

DeGering, E., Gallaudet: Friend of the Deaf. Washington, DC: Gallaudet College Press, 1964 (originally published by David McKay Co.).

Eastman, G., Sign Me Alice. Washington, DC: Gallaudet College Press, 1974.

The Gallaudet Almanac. Washington, DC: Gallaudet Alumni Assn., 1974.

Gannon, J.R., Deaf Heritage. Silver Spring, MD: National Association of the Deaf, 1981.

Goodstein, A. & Walworth, M., Interesting Deaf Americans. Washington, DC, Gallaudet College, 1979.

Greenberg, J., In This Sign. New York: Holt, Rinehart and Winston, 1970.

Higgins, P., Outsiders in a Hearing World: A Sociology of Deafness. Beverly Hills, CA: Sage Publications, 1980.

Humphries, T., Padden, C., & O'Rourke, T. J., A Basic Course in American Sign Language. Silver Spring, MD: T. J. Publshers, 1980.

Kannapel, B., "Bilingualism: A New Direction in the Education of the Deaf," in The Deaf American, 1974, Vol. 26, #10, pages 9-15.

Lang, L.G. & Pittle, I.B. (eds.), A Handful of Stories. Washington, DC: Gallaudet College Press, 1981.

Meadow, K., "Sociolinguistics, Sign Language and the Deaf Subculture," in T. O'Rourke (ed.), Psycholinguistics and Total Communication: The State of the Art. Silver Spring, MD: American Annals of the Deaf.

Padden, C. & Markowicsz, H., "Cultural Conflicts Between Hearing and Deaf Communities." In A. Crammattee & F. Crammattee (Eds.), Proceedings of the Seventh World Congress of the World Federation of the Deaf. Silver Spring, MD: NAD, 1976.

Panara, R. & Panara J. Great Deaf Americans. Silver Spring, MD: T.J. Publishers, Inc., 1983.

Parents' Guide to the IEP. Washington, DC: Outreach, Gallaudet Pre-College Programs, 1986.

Stokoe, W. Sign and Culture: A Reader for Students of ASL. Silver Spring, MD: Linstock Press, 1980.

Toole, D.K., Courageous Deaf Adults. Beaverton, OR: Dormac, 1979.

_____, Successful Deaf Americans. Beaverton, OR: Dormac, 1979.

Wilbur, R. American Sign Language Sign Systems. Baltimore, MD: University Park Press, 1979.